Clinical Lectures
ON
DISEASES OF THE CHEST.

Delivered at Charing-cross Hospital,

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LECTURE VII.—PART II.

ON CASES OF COMBINED MITRAL AND AORTIC REGURGITATION.

CASE 3.—Francis C——, aged thirty-one, of dark complexion and remarkably pale, by occupation a floor-cloth printer, a calling which exposes those engaged in it to great heat, and keeps them, together with their hard labour, in perpetual perspiration, was admitted into the hospital on account of the symptoms of heart disease, on Sept. 13th. He is temperate, married, and has three healthy children. His paternal grandfather was the only rheumatic member of his family.

He was quite well up to eighteen years of age, when he was attacked with rheumatic fever. He was at that time working in a temperature of 95° F., and when profusely perspiring had often to go into the yard in the rain to fetch his work in. This attack of rheumatic fever appears to have been remarkably severe, and confined him to his bed for eighteen months; it was six months more before he was able to resume his work. During this attack he had some pain in the region of the heart and shortness of breath; but the heart was not examined. He then went on very well for seven years, doing his work as usual, and then, four years ago, experienced his second attack of rheumatic fever. He was laid up with this attack about six months, and did not during it feel any pain in his heart, or breathlessness. But about three months after he was convalescent, and before he had resumed his work, he went to Buxton to take the waters, and there the physician who examined him detected the heart disease. At the same time he began to experience some shortness of breath and palpitation, to a degree he had never done before. This gradually wore off; but if at any time he exerted himself unusually, such as by running upstairs or lifting a weight, it immediately came on. Under such circumstances a violent, stabbing, tearing pain would seize him in the left breast, accompanied by palpitation and breathlessness, and preventing his moving. Seven months ago the rheumatic symptoms appeared for the third time, but not to such a degree as to lay him up. Three months later, however, he was seized with lumbago so severely that he was obliged to give up work, and has not been able to resume it since. About six weeks later he became dropsical, his legs swelled, his scrotum, and his whole body; at the same time his heart became much worse, the cardiac distress became constant, he was obliged to be propped up with pillows at night, and the beating of the heart was so violent that it shook the bed. His water at the same time was "muddy," and dark, and scanty. The dropsical swelling lasted about five days, and then quite disappeared, leaving however a tightness round the body. The extreme heart trouble has gradually gone off, and now he experiences no discomfort unless he exerts himself, when all the old symptoms are immediately produced, and to a degree greater than ever before the last attack.

From this history I infer, that four years ago, in the second attack, although he did not during it suffer noticeably from any cardiac symptoms, it is almost certain that the heart must have been involved, as three months later he began to experience palpitation and breathlessness to a degree he had never done before, and the signs of heart disease were detected by the physician at Buxton; and that three months ago, at the time the general dropsy came on, he experienced either a fresh inflammatory attack upon the heart, or an attack of renal congestion or nephritis involving the heart functionally, or both. If the extreme heart trouble that he then suffered arose simply from an acute attack of endo- or peri-carditis, without any renal complication, the immediate appearance and the rapid disappearance of the dropsy were remarkable. I am inclined to think the dropsy was acute renal dropsy, especially as he states that his eyes were puffed of a morning, and that the swelling went down each day. It is perfectly possible that, although the dropsy was strictly renal, and the heart functionally disturbed by attendant uræmia, it may have been at that time the subject of a fresh attack of inflammation. On examining the water now, I find it free from any trace of albumen, of natural appearance, acid, and of specific gravity 1015.

Physical examination.—Beneath the fifth rib, and most conspicuously about half an inch outside the nipple line, a double impulse is seen—that is to say, two impulses going in twos; the first of the two, which almost exactly coincides with the radial pulse, is more sustained and diffused; the second is circumscribed, short, flicky, and wave-like, succeeding the radial pulse by a considerable interval. On applying the finger firmly at the point of impulse, it is strongly raised at the first of the impulses (that corresponding with the radial pulse), and not at all at the second, its pressure being quite unresisted, and the impulse unfelt. On laying the finger, however, very lightly on the surface at this point, so as just to establish contact and nothing more, it is perceptibly raised by the second impulse as well. The arterial pulsations at the neck and arms are but slightly more conspicuous than natural. There is a certain fulness at the cartilage of the fifth, sixth, and seventh ribs on the left side. At the right third cartilage a soft, blowing, prolonged diastolic murmur is heard, running from a loud and clear diastolic stroke; at the left third cartilage the murmur is perhaps slightly louder and more prolonged, and the stroke feebler; at the fourth left cartilage the murmur is perhaps still louder, but the initial diastolic stroke almost gone, so that the murmur begins nearly as softly as it terminates; at the fifth left cartilage the murmur has suddenly become very feeble, but it is audible quite down to the apex. Over the whole of this region the first sound is loud and clear, and towards the apex attended with considerable impulse; but when the apex is reached, a soft, blowing, systolic murmur is heard. The maximum intensity of this murmur seems to be at the right margin of the nipple, and it is certainly feebler, contrary to my usual experience, towards the axilla. Pulse 64, respiration 19; pulse-respiration, therefore, 1 : 3¼.

The first thing to be remarked in this case is that it is an example, as is Joseph H——'s, of rheumatic fever in a man of dark complexion. You know how often I am pointing out to you the frequency with which we find rheumatic fever and its results in people of fair complexion, with red or sandy hair and light eyes; and I fancy some of you think I ride my hobby rather hard. It is right therefore and fair that I should call your attention to any exceptions to this rule that we may meet with.

In the second place, the case exemplifies the potency of sweating in favouring the development of the rheumatic state. You could hardly conceive of circumstances more singularly favourable for the induction of rheumatism than those under which this man was working—a temperature of 95°, a streaming perspiration, and sudden chills. There is no one precursory event in the clinical history of rheumatic fever so constant as the occurrence of previous sweating. There cannot be a doubt that an amount of cold that will inevitably give a rheumatic man rheumatic fever would be utterly powerless to produce such a result in one whose skin had not been heated. I am aware that a certain school of pathologists who attribute everything to nervous influence, and start all morbid processes from deranged innervation, might say that the greater the previous heat the greater the contrast, and therefore the greater the nervous shock from the subsequent cold; and that a sweating skin is an evaporating skin, and therefore a more cooling skin than a dry one. But I believe there is something more than this; I believe that a sweating skin is a skin that is throwing off something more than a dry skin, and that a sudden check to a sweating skin throws back this something on the blood, and that the throwing back this something on the blood is intimately connected with the development of the rheumatic humoral condition.

In the third place, I would point out to you the uncer-

tainty, when there have been several attacks of rheumatic fever, as to which one the heart affection is due. Sometimes it is impossible to decide this question, and attempting to do so is mere guesswork. You then do not know how old the heart mischief is. This sometimes affects the prognosis, because evidence of organic damage, the result of recent mischief, gives you more latitude, and more margin of hope, than the same amount of damage from old mischief. But I think in this case there can be no doubt that the heart affection dates from the second attack of rheumatic fever, four years ago, and not from the first one; because it is not likely that the symptoms of heart disease shown three months after the second attack should be attributable to a first attack separated from it by seven years of perfect health.

The case shows also that permanent heart mischief may be inflicted by rheumatism, and yet there shall not have been anything which shall have made the patient conscious of it, or directed the physician's attention to it, during the attack.

As a corollary of this, this patient's history implies, what so many cases prove, that the amount of mischief and disorganisation inflicted on the valves by rheumatic endocarditis increases, and increases continuously, after, and long after, the original mischief is inflicted.

I am inclined to think that at the time of the renal dropsy (which must have undoubtedly been renal) he had a fresh inflammatory attack on the heart, and not a mere functional disturbance of it; for else how can we explain the fact that the heart symptoms have been worse since than they ever were before? The present condition of the heart is therefore the result of at least two attacks.

What interpretation are we to give to the double impulse at the apex, and what inference are we to draw from the different impression derived from firm and light pressure? No doubt we have here a particular phasis of diastolic impulse. The first impulse was undoubtedly systolic, and drove the finger before it with systolic force. The second must have depended on some feebler force, something capable of gently moving the yielding intercostal parietes, but incapable of resisting the pressure of the finger—either the recoil of the relaxed ventricle, or the sudden filling of it with the regurgitating blood, or some other unexplained cause.

Let me point out to you the non-postponement (to any material degree) of the radial pulse in this case of aortic regurgitation—its immediate sequence on the systolic, and anticipation of the diastolic sound and murmur.

Observe, too, the peculiar relation of the diastolic sound to the diastolic murmur at the third right, third left, and fourth left cartilages, so exactly coinciding with the same characteristics in Thomas J—— and Joseph H——, and so well illustrating the different results of convection and conduction.

Lastly, note the exceptional point of maximum intensity of the mitral systolic murmur in this case—the level of the nipple, and immediately to its right. What should make it take up such a position I am quite unable to explain to you.

Let me, in conclusion, point out to you how many peculiarities these three cases have in common. In all of them the nature of the lesion is the same, double regurgitant, giving a systolic apex and a diastolic basic murmur; in all we have considerable hypertrophy; in all the aortic regurgitation comports with well-developed second sound; in all the second sound is louder at the aortic than at the pulmonary cartilage; in all we reach the point of maximum intensity of the aortic regurgitant murmur on leaving the neighbourhood of the aortic valves and descending to the left; in all the relative situation and distribution of the two murmurs is the same, overlapping in the neighbourhood of the nipple line and apex, but to the right and left of this, single; in all there was moderately marked regurgitant pulse.

But in spite of all these points of resemblance, there is one point in which they are strongly contrasted—that while in the case of Joseph H—— there is fairly developed *diastolic impulse*, in that of Thomas J—— there is not a trace of it, while in Francis C—— there is that which we must regard as a modified representative of it. This, I must confess, conflicts with an idea that I had conceived as to the cause of this phenomenon. In several cases in which I have observed it there has been a concurrence of aortic regurgitation with hypertrophy, and I had imagined that it might depend, as I have already hinted to you, on the reflux of blood from the aorta down into the ventricle, aided by the recoil of the massive ventricles against the thoracic parietes when released from the systolic contraction which had just gathered them up and withdrawn them in a degree from their passive and expanded contact with the chest wall. This, I thought, might be its physical explanation; but here, in the case of Thomas J——, we have these two very things, the regurgitation and the hypertrophy, and yet we have not a trace of diastolic impulse. We must therefore cast about for some other explanation of it; or, rather, we must keep our minds in an inquiring and receptive state, that we may detect and recognise any other explanation that may develop itself.

There is one point in the case of Joseph H—— that I had wellnigh forgotten, on the strength of which I would give you a warning. You may remember that on first listening at the base of the heart I could hear no evidence of aortic regurgitation; but feeling convinced, from the character of the pulse, that such regurgitation existed, I listened for the murmur over the fourth left cartilage, and there immediately heard it. Now let me warn you, on the strength of this, not to conclude that because you do not hear a diastolic murmur over the root of the aorta there is no aortic regurgitation. You must not always go to the base to hear a basic murmur. Aortic regurgitant murmur is always spoken of as basic; and it is of course basic as to the seat of its generation; but the place at which a murmur is generated is one thing, and the place at which it is heard is another. I have shown you in a former lecture to what a distance from the seat of their formation convection will transfer cardiac murmurs, and how much more audible they may be, under the influence of this cause, at a distance from the seat of their development than near it. No murmur illustrates this better than that of aortic regurgitation. It is so common to hear this murmur louder towards the apex than at the base, that I have ceased to look upon that as anything remarkable; and this case of Joseph H——'s is by no means the first in which a diastolic whiff at the fourth or fifth cartilage has shown me the existence of aortic regurgitation, of which there was no sound over the aortic valves to raise the slightest suspicion. I believe that the time is not far distant when the doctrines which I preach to you on this subject will be generally received and taught, and when students will be told that they will have often to look for a basic murmur at the apex, and for an apex murmur at the axilla.

SOME PROPOSITIONS ON HOSPITALISM.

By the late Sir J. Y. SIMPSON, Bart.

(*Concluded from p. 700, vol. ii. 1869.*)

[In publishing this remaining fragment of Sir James Simpson's papers on Hospitalism in the place where his son informs me he had intended it to appear, I regard it as fortunate that in it we find suggestions for the remedy of the evils he had pointed out. The premises he argued from, and the conclusions he arrived at, have been disputed by some most competent to do so; and though there can, I think, be little doubt that there is some measure of evil and need of change in the direction he has indicated, whether these are as great as he believed is still open to doubt, and much work must be done before it can be settled. To the further elucidation of the question I mean to devote myself; and I would earnestly beg the readers of THE LANCET to aid me as far as they can should I have to appeal to any of them for statistics. This important question can be settled only by facts, and much care will be required in collecting and arranging them. Should the conclusions we may have to adopt after renewed investigations be those already maintained by the late Sir James Simpson, I need scarcely add that another of the many advances our profession has made in recent years will be due to the efforts of his genius.—LAWSON TAIT.]

THERE is another question of vast moment in the subject of Hospitalism—namely, How could our present older hos-

pitals be most simply and cheaply changed with the hope of improving their insalubrious character? I have elsewhere commented shortly on this subject.* Perhaps there are two chief methods by which such a revolution may be effected architecturally: first, by making the staircases, corridors, &c., all open; or, secondly, by building-up the doors and entrances of the wards into these staircases, corridors, &c., and by making an entrance into each ward from without. One or other of these two plans would, I believe, suffice for the improvement of most hospitals. Other and better plans, however, may possibly be devised.

We have already seen under Proposition XX. that, in consequence of the rapid diffusion of light and aëriform bodies in the atmosphere of a hospital, the contents, organic and inorganic, which every ward contains, and the exhalations, cutaneous, pulmonary, &c., which emanate from each patient, pass out of the wards themselves to the corridors, galleries, staircases, &c., of the house, and, in consequence of all the wards opening into them, pass and repass from one to the other in a more or less diluted and intermixed form, just as if the whole hospital were one single vast chamber. The deteriorated and polluted atmosphere of the wards, passing freely into the staircases, galleries, &c., is retained and imprisoned, as it were, there, and liable to pass onward into other apartments and wards; for there is generally, as is well known, a double and contrary current of air passing at different heights in and out of the doors of such apartments. When the foul air of a house, or apartment, or ward, passes out directly into the outer atmosphere, it then and at once loses any deleterious properties belonging to it, because it is swiftly diffused through the almost ever-moving and ever-changing external air, in which a rapid system of self-purification is constantly going on. By having the staircases, corridors, galleries, &c., of a hospital freely open to the external air, and by thus permitting the external air to be constantly passing and sweeping through them, would we not attain two great objects? First, the avoidance of the retention and imprisonment to a greater or lesser degree of the *internal* befouled hospital air in these staircases, corridors, galleries, &c., with the chance of its repassing in its deteriorated state into other wards; and, secondly, the filling and occupation of the staircases and other spaces with air having all the purity and purifying powers of the *external* atmosphere. The degree to which this latter important object could be obtained in each individual hospital would depend, of course, upon the degree to which the staircases, passages, &c., were freely and fully opened up. The permanent opening, in half or in whole, of a single window or two in a staircase, or corridor, or gallery, would perhaps do much; but the permanent opening of all the windows would do far more. If ever, in order to render the opening of these staircases, galleries, &c., more full and free, the removal of a portion of their containing or outer wall was required to be adopted in some instances, this would be, after all, doing nothing more than what has recently been effected in the building schemes of Sir Sydney Waterlow and other philanthropists in the construction in London and elsewhere of blocks of houses for artisans, the flats being connected by *open* staircases, and each flat being provided with an *open* balcony, in which balcony all the doors of the tenements of that flat have their entrance. If a hospital were so altered as here suggested, the entrance of each ward from the stair-landings, corridors, &c., would probably require to be provided with double doors, to protect, when necessary, against gusts of wind and cold.

It is not my object here to discuss the question how each separate ward may be best and most thoroughly ventilated. Many artificial plans have been proposed, and have been attempted to be put in practice; but all these artificial plans have hitherto, it must be confessed, ended in failure. We can readily send in carburetted hydrogen gas by tubes into houses and rooms from great distances for the purpose of lighting; and some similar simple plan of pouring into every inhabited chamber, even in our crowded cities, an adequate and continuous stock of fresh and country atmospheric air may yet betimes be fallen upon; but up to the present hour, no artificial system of perfectly and successfully ventilating individual wards has been suggested, and the "natural system" of ventilation by fireplaces and opposite and partially-opened windows is chiefly, and in most instances entirely, depended upon.

Instead of opening-up staircases, corridors, &c., if they were left in their present condition in some hospitals, perhaps the perfect isolation and ventilation of the individual wards could be effected more perfectly in the following manner: build-up the doors, and any other entrances from the wards into the stair-landings, corridors, &c., and make all the wards and all the flats be entered from without, either by new external staircases, if the hospital were not above two stories in height, or by covered balconies or galleries placed upon the outer wall of the ward, and to which balconies or galleries entrance was given by the existing staircases. If every ward were thus prevented from sending its deteriorated air into the interior of the house, with the mischance of polluting the general atmosphere of the hospital, and if itself it had only communication with the external atmosphere, then each ward would become a separate cottage hospital, as it were, with a self-ventilation entirely its own. The perfection or imperfection of that self-ventilation would depend upon the number and position of its fires, windows, &c.; but its contained patients would be freed from the danger of breathing an air contaminated by the emanations and exhalations from the patients in the other wards of the institution. One of the end windows in each ward would, of course, on this principle, require to be changed into a door-entrance, and to be duly protected by being provided either with a double door or by being made to open into a small end room, such as are found in almost all hospital wards. These balconies, connecting these ward doors with doors made by the removal of a window on the stair-landing or a staircase, could perhaps be cheaply and strongly enough made of iron, and covered by it or other material.

A hospital, if changed on this plan, would still have its internal staircases, corridors, wards, &c., as before; but instead of having the air belonging to all of its interior fully and dangerously intermixed, it would have every ward changed into a separate and self-ventilating apartment, opening and sending its air only to the external atmosphere, and deriving its own air only from that external atmosphere. Its wards would be a series, so far, of self-ventilated cottage hospitals, each in its ventilation perfectly isolated, and separate from and independent of all the others that belonged to the institution.

In the late American and German wars, small military hospitals, consisting of canvas tents, wooden cottages or barracks, and single-storied buildings erected of various materials for hospital purposes, have been employed to a much greater extent than I believe they ever previously were. Subsequently to the battle of Sadowa, and after many of the palatial hospitals in various cities of Germany had been so filled with the wounded and sick that they could hold no more, the overplus was placed in various hospital grounds and elsewhere in canvas tents and wooden sheds or barracks erected for the purpose. The treatment of the patients placed in these small cottage barracks and tents proved so much more successful than the treatment of similar patients who were lodged in the olden, many-storied, palatial hospitals, that latterly, in various and extensive cities in Germany—as Berlin, Dresden, Kiel,—erections of the same unsubstantial kind have been reared around many of the old hospitals, and employed, because, as proved by military medical experience, they seem to afford far more salubrious dwellings for surgical and medical patients than the olden, many-storied hospital mansions. In other words, what proved so serviceable in military surgery and medicine as a hospital arrangement, has been adopted already to considerable extent in civil surgery and medicine also. They have been tried also to a slighter extent in Paris. With what results? *Success of canvas and wooden &c. cottage hospitals.*

Cottage hospitals of double canvas and wood—some of the latter so formed and built as to serve in winter as well as summer—have been more largely employed in Germany than in France. When writing to me lately on the subject of these German cottage hospitals, Professor Gurlt, of Berlin, remarks: "In regard to the experiences made in Berlin and elsewhere in Germany, I can assure you *positively* that the tent and barrack hospitals have proved with us more salubrious and less deadly than the large palatial hospitals. But, nevertheless, it must be added that cases of septicæmia

* See British Medical Journal.

must occasionally occur in them as everywhere else, being dependent in part upon the severity of the lesion in itself (as we have seen by far too often during the last war, under the most favourable external circumstances). Pyæmia occurs also sometimes in them; the oftener the more the season is unfavourable and admits of no sufficient ventilation by a free access of air; and the longer also the barrack or tent is in continual use, and the more severe cases are accumulated in them. There cannot," Dr. Gurlt adds, "be any doubt that every porous material, stone, wood, canvas, &c., which may be employed for hospitals, must become infected betimes, and the rooms must be emptied therefore *pro tempore*, and cleaned with the utmost care."

Upwards of twenty years ago, in publishing a Report of the Edinburgh Maternity Hospital, I took occasion to remark: "There are few or no circumstances which would contribute more to save surgical and obstetric patients from phlebitic and other analogous disorders than a total change in the present system of hospital practice. I have often stated and taught that if our present medical, surgical, and obstetric hospitals were changed from being crowded palaces with a layer of sick in each flat, into villages or cottages with one or at most two patients in each room, a great saving of human life would be effected; and if the village were constructed of iron (as is now sometimes done for other purposes), instead of brick or stone, it could be taken down and rebuilt every few years—a matter apparently of much moment in hospital hygiene. Besides, the value of the material would not greatly deteriorate from use; the principal outlay would be in the first cost of it. It could be erected on any vacant space or spaces of ground, within or around a city, that chanced to be unoccupied; and in cases of epidemics the accommodation could always be at once and readily increased."*

Several years afterwards, in publicly discussing the same subject, I spoke to the questions—"To what extent are hospitals, as in general at present constituted, banes or blessings? and how can they be changed so as to convert them from the former to the latter?" And I concluded by again suggesting that, to gain sufficient room and air and isolation for the sick inmates, they should be altered from wards into rooms, from stately mansions into simple cottages, from stone and marble palaces into wooden and brick and iron villages.†

"Although the establishment of hospitals is a necessity, and marks the era of an advanced civilisation, it must always be remembered that, if the crowding of healthy men has its danger, the bringing together within a confined area of many sick persons is far more perilous. The risks of contamination of the air and of impregnation of the materials of the building with morbid substances are so greatly increased that the greatest care is necessary that hospitals should not become pesthouses, and do more harm than good. We must always remember, indeed, that a number of sick persons are merely brought together in order that medical attendance and nursing may be more easily and perfectly performed. The risks of aggregation are encountered for this reason; otherwise it would be far better that sick persons should be separately treated, and that there should be no chance that the rapidly changing, and in many instances putrefying, substances of one sick body should pass into the bodies of the neighbouring patients. There is, indeed, a continual sacrifice of life from diseases caught in or aggravated by hospitals. The many advantages of hospitals more than counterbalance this sacrifice, but it should be the first object to lessen the chance of injury to the utmost. The risk of transference or aggravation of disease is least in the best ventilated hospitals. A great supply of air, by immediately diluting and rapidly carrying away the morbid substances evolved in such quantities from the bodies and excretions of the sick, reduces the risk to its minimum, and perhaps removes it altogether. But the supply of air must be enormous. We are not in a position to say how much; but I question whether even the large quantity of 4000 cubic feet per head per hour, now assigned by the best observers, will not be found to be far below the proper amount for the acute and febrile diseases."

* Edinburgh Monthly Journal of Medical Science for Nov. 1848, p. 328.
† Transactions of the Social Science Association for 1867, p. 115.

WHAT WE OBSERVED DURING A RECENT VISIT TO THE SEAT OF WAR.

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(*Continued from p. 665.*)

LEAVING Sedan by way of the French towns of Mezières and Givet, we made our way by a circuitous route to Saarbruck. Seeing in these towns a large number of French soldiers, and having previously observed many Belgian ones, we were enabled to compare them with the Prussian, of whom we saw large numbers. The superior physique of the Prussians is very marked, and their mental condition is quite as much superior as their bodily is to that of the French and Belgians. We found the Prussians, officers and men, very intelligent, courteous, and well informed. Many with whom we spoke attributed their success to their superior education and their better artillery. How far moral courage may also have helped them we have no means of knowing, but there can be little doubt that it has been an important element of success.

On our way we passed Arlon, the depôt of the National Society, which has proved a most inconvenient station for the purpose, and has sufficiently demonstrated by this fact the absolute necessity of having everything at hand and well organised for all field hospital work.

At Saarbruck we were first struck with the extent and completeness of the provision made for the conveyance of the wounded. At the station were many waiting to be sent off, those who were able being seated in the railway carriages; others placed in hammocks hung by means of india-rubber fastened on the sides; and their comfort appeared to be cared for as much as was possible under such circumstances. It was an extraordinary sight to see such scores of stretchers, of all possible shapes, lying about in heaps; long wooden tents outside the station, as well as an enormous extemporised waiting-room in the building, for the soldiers to wait and to feed in. The evidences of dysentery among the railway travellers were repulsively manifest; and we cannot imagine why the simple plan suggested by Captain Brackenbury, of having long trenches at the stations, with a supply of earth, for the use of the men, has not yet been adopted.

The Prussian Ambulance, at the Casino, a handsome stone building near the river, with beautiful gardens at the back, and a most luxuriously decorated suite of rooms within, formed such a charming retreat after the turmoil of battle as must surely have conduced, if anything could, to alleviate the depression of its inmates. The large concert room, devoted to the officers, is very high, with large glass doors and windows, constantly open, and there was an airiness about it which is unhappily most unusual. Everything was very clean; the patients were abundantly supplied, even to luxuries. We were told the cases had done very well. One French officer we saw had a gunshot wound of the leg, the ball having entered at the groin and passed out below the knee; doing well. There was a case of the fever which has prevailed so much, and which the Germans and Dutch term abdominal typhoid. The patient had a shell wound of the leg; dry tongue and lips; occasional delirium; *no rash*; soft, quick pulse; flushed face; hot, dry skin; and tendency to diarrhœa. A Prussian officer, wounded by a chassepôt bullet in the front of the thigh, had not much pain in the wound, but horrible suffering in the foot. Worn down by pain, he had caught cold, and was now suffering from lung mischief to a much greater degree than the poor fellow would admit.

The Civil Hospital at Saarbruck we found a commodious building, with large entrance-hall; but the wards opened into a corridor, and had therefore windows on one side only. The wards were of moderate size, each one containing from six to a dozen patients, of whom the great majority were military cases. By the side of every bed was a closed locker, with a drawer; and standing on each one was a bottle of water and a glass. Ventilation only by windows and doors.

Bedsteads of wood; floors of polished oak. The beds had springs, with wool mattresses.

We saw in one of the wards an admirable contrivance for a lifting bed. The ordinary bedstead stands within the lift, which is merely a framework. The raising is effected by means of a handle attached to a winding iron rod at the head and foot; over each rod passes a band of webbing, attached to the framework below, which lifts it to any required height. A series of screws at the sides tighten the cross-bands which form the floor of the lift, and these can be placed at any distance, or removed for convenience of dressing, &c. The case we saw was one of gunshot of the thigh, with anterior wound of entrance and a posterior wound of exit. The thigh was bound up in cardboard splints, the posterior wound being left open. The patient raised, the wound was readily dressed, without the slightest movement. It was done in this way: first very freely syringed out with dilute Condy's fluid by means of a very simple "irrigateur," and then covered over with simple charpie and lint. The dressing was changed twice a day.

A case of resection of tibia for shell wound was doing very well, placed in an open wire-work splint shaped like Butcher's, but sufficiently large to admit a water-pillow within it as a pad, and a very excellent and cleanly pad it was. The whole was steadied by means of sand-bags, and the patient said he was quite comfortable. Everything was very clean, and the ward arrangements were very complete.

The Swiss Ambulance was situated at some barracks on the hill towards Spicheren. A large room, containing about thirty beds, with opposite windows and three doors, formed the chief ward. The same general plan of treatment was adopted as elsewhere, much being left to the *vis medicatrix naturæ*. Simple charpie, moistened with warm decoctions of chamomile or poppy, along with free cleansing of the wounds with some disinfecting fluid, was the ordinary dressing. There had been only one case of amputation, in upper third of the thigh, and he was recovering. We saw a compound fracture of the thigh, in which there was quite a small anterior entrance-wound, with a large jagged posterior one of egress, put up in a long plaster-of-Paris splint, reaching from the ilium to the toes, with windows for dressing the wounds. Another compound fractured thigh was being treated by the pulley, which was ingeniously screwed into the foot-board of the bed, as shown in the accompanying engraving; much too heavy a weight being attached, however, which we ventured to suggest would answer its purpose more easily and quite as effectually if diminished by about two-thirds. We noticed a man dying from the so-called typhus, which was at the time making sad havoc in the district. He was quite prostrate, with quick, weak pulse, sallow countenance, skin moderately but not excessively hot to the touch; tongue dry and coated, but no brown fur upon it; no spots anywhere; no tympanitis; no purging. This case differed somewhat from the one already mentioned, but this was probably owing to the different stages at which we observed the disease. The cases of fever and dysentery together were being brought into Saarbruck from the Metz army at the rate of about forty a day; the mortality of the latter, we were informed, did not exceed 5 per cent.

We were much interested with the Dutch Ambulance, and had the advantage of being shown over it by a most courteous and intelligent volunteer surgeon, Dr. Lehmann. The Dutch had, immediately after the battle of Spicheren, established their ambulance hospital in the gymnasium and riding school. This was a large one-roomed building, 80 or 90 feet by 60 wide, and with a very high open roof. The windows opened, and were about 12 ft. from the ground, arranged opposite, and there was a large door at each end of the building. The floor was several inches thick with tan and sawdust. Carbolic acid was used so freely that the surgeons on going to dinner were redolent of it; and at the time we saw the place, more than a fortnight after being cleared, the smell was quite strong. For about five weeks the cases went on very well; at the end of that time a compound fracture went wrong, soon another and another. Then dysentery and pyæmia made their appearance; and it was decided at once to vacate the building. The patients were removed, some into adjoining barracks, others into large tents; but the latter had soon to be relinquished on account of cold. The rooms in these barracks were small, most of them having only four or five beds, and were, perhaps, the worst adapted for the purpose of any we had seen. There were some cases of fever, of similar type to those already mentioned; and they were evidently considered as typhoid, although we came to the conclusion that the continental surgeons seemed, as a rule, not to distinguish as clearly as we do the line between typhus and typhoid. Many cases of dysentery, too, had come in, usually of a severe form, but not very fatal, as we have already mentioned in speaking of the Swiss hospital. The patients suffered much pain, with frequent purging, and almost constant tenesmus; their faces pale and pinched. The greatest relief was afforded by the hypodermic injection of morphia, in doses of one-sixth to one-fourth of a grain; but opium was also freely given. There was a man with a gunshot wound of the shoulder, with one opening in front of the axilla, and four others on the posterior surface; the ball, no doubt, having been split up into fragments, which were still left in. The rule is with the Dutch only to remove the ball when this can be accomplished quite readily. These wounds were dressed with charpie dipped in carbolic-acid lotion, the edges of the wounds being first pencilled over with collodion.

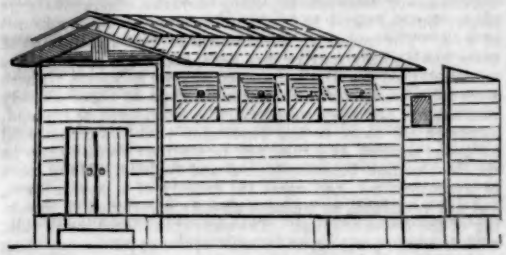
The diet was very liberal: meat in full quantity twice a day; soup twice; one bottle of wine; coffee, tea, and biscuits (like rusks) as much as they liked,—constitute ordinary rate. Extras of all kinds were ordered when necessary.

The iron bedsteads had a hinge near the centre, so as to form a bed-rest; and in this way pillows were to some extent superseded.

We found the stores of this ambulance most admirably arranged, being entirely under the management of a private Dutch nobleman—and a very pleasant, jolly-looking, and intelligent one withal. Everything was brought from Holland except meat, and bread, and milk. All the different articles were arranged in a room of moderate size outside the barracks, in a most methodical manner, each portion allotted having a plain label. We noticed a large quantity of preserved edibles—such as extract of beef, extract of milk, extract of coffee, herrings, cheese, tea, coffee, sugar, &c., *ad infinitum*. Along with all these we were shown a portable cooking stove, after the pattern of one recommended by Professor Longmore. It is only about eighteen inches square, but in a few minutes will make soup or coffee for fourteen or sixteen men; and a chop or steak can be prepared as quickly. Nowhere else did we see anything approaching the completeness of the arrangement of this store. In this, as in the Prussian hospitals we visited, we noticed the absence of any superfluous attendants, though there was everywhere enough of everything needful; and the patients in every case expressed themselves as being comfortable, and all of them equally well cared for.

The Belgian Ambulance is situated in a garden about a quarter of a mile out of the town; and consists of a series of ten wooden huts, five on each side with a street between. They are each about 40 feet long and 25 feet wide, and the space between each is about 30 feet. There were fifteen beds in each. The ground is well drained, and the floor of the huts about two feet from the ground. They are built of rough pine boards, the roof being open along the centre for about six inches on each side of the long beam. The doors are facing the street; the windows about five feet from the ground, four on each side of the ward, opposite each other. The lower part of the windows is of glass, but the upper part consists of a wooden shutter, opening by means of a hinge above, so that it can be closed or opened to any required extent. The air can thus find its way in and out most freely, the planks forming the floor being half an inch apart to facilitate ventilation. The atmosphere of the wards was peculiarly free from the usual hospital smell. At the end of each hut, opening from the side and separated by a corridor in which are two opposite windows, the closets are placed. The receptacles are of wood, and are emptied and washed out with chloride of lime twice a day, earth being used. The huts for stores, kitchens, &c., were more firmly built, and excellently arranged.

The results in this ambulance had been most satisfactory. Of 300 cases admitted, only 12 had died; and of 30 cases of fever, only 4 or 5 had died. There had been some dysen-



Side view.

End view.

Belgian Ambulance Huts at Saarbruck. Made of rough logs of pine. Cost about £9 each to build, exclusive of material; and accommodates 15 patients.

tery, but of a mild type. Total cost of the ambulance from the commencement to the 23rd of Sept., 5402 francs (or £216). Of this amount, 3561 f. had been expended in the purchase of food &c. for the patients and staff; 529 f., expense of journey to Saarbruck; 562 f., for drugs; 750 f., indemnity to medical men at 10 f. a day each. Up to the 18th of Sept., 159 sick and wounded had been admitted: died, 7 (typhus, 4); sent out cured, 38. There were 141 Germans and 18 French. Of Germans: 33 wounded, 37 typhoid, 64 dysentery, 2 ophthalmic cases, and 5 other cases. Of French: 17 wounded, 1 typhoid. Staff: 2 directors, 4 physician-surgeons, 1 dispenser and his assistant; 6 male and 6 female nurses, 1 cook and assistant, and 1 laundress.

We must not leave Saarbruck without expressing our warmest thanks to Dr. Hardwicke, whom we met there, and who was most obliging in putting us in the way of obtaining information. He had been at Saarbruck nearly a month, and his only grievance appeared to be that he really had nothing important to do during the whole of that time. The English work there appears to have been done in a very desultory way, little calculated to bring our country into good repute.

The indomitable determination of the Prussians was nowhere more clearly shown than by a visit to the heights above the town, where the battle of Spicheren took place. The position is so impregnable that we could not help expressing our astonishment at the French ever allowing it to be taken from them.

At Saarbruck, as elsewhere, the number of patients in the ambulances was fast lessening, as those who were sufficiently recovered were being sent away. The places of the wounded were, however, being filled up to some extent by others affected with dysentery and fever, who were daily being brought in from the army before Metz. In the carriage with us when we left Saarbruck were three very interesting cases. One man, a Prussian corporal wounded at Gravelotte, had received a chassepôt bullet below the left orbit, which passed through the palate, and made its exit in the middle of the neck on the opposite side. The wounds were nearly healed. Another, a Prussian private, at Spicheren, was about to fire when a bullet struck him on the upper jaw, carrying away the whole of his upper front teeth and the alveolar processes with them. While he was spitting out this unpleasant bolus, a second shot entered his mouth, smashing the left side of the upper jaw, and passing out through the malar bone. The third had a bullet wound of the forearm, and another in the loins, the balls having been in both instances extracted. They were all in capital spirits, and ready enough to keep up a vigorous song—the jaw-maimed man quite as loudly as the rest. These men were going with a number of others to Coblentz. Such instances might be multiplied almost indefinitely, so eccentric and so varied are battle-field injuries.

(To be continued.)

A CASE OF PUERPERAL CONVULSIONS BEFORE LABOUR, AND CONTINUED AFTER, WITH UTERINE PHLEBITIS; RECOVERY.

BY WILLIAM DEELEY, M.D. NEW YORK,
FORMERLY SURGEON TO THE ADELAIDE.

ON the 17th of September, at 8 A.M., I was sent for to attend A. M——, aged nineteen, then in labour of her first child. She had been suffering from pains all night, which were strong and steadily increasing; os dilating; membranes entire. At 11 A.M., during a pain, the membranes ruptured; and finding the head not descending with the pains, which continually increased in length, strength, and frequency, whilst she complained of pains in the head, and had suffused countenance, I sent for instruments, to be in readiness in case of need. Between the pains the patient walked about the room, then I had her placed on her side, back, and knees alternately. Still the head did not descend, the pains continuing all the while strong, long, and frequent. About 3 P.M., shortly after a pain, and whilst on her left side, a violent epileptic convulsion set in—foaming at the mouth, face horribly distorted and of a leaden hue. The muscles of the body, legs, and arms were thrown into violent action, the limbs jerked in all directions, with creaking sounds, as though every bone was snapping in pieces. Such was the violence of this terrible paroxysm that the room shook again, and the women in attendance all ran away frightened, thinking the spasms were the throes of death. As soon as possible I applied the long forceps over the forehead and occiput, and with steady traction brought down the head, and delivered her, without any laceration, of a large living child, a boy, the patient being unconscious. Shortly afterwards she partly recovered consciousness, and then another fit came on. I removed the placenta and applied a binder. No hæmorrhage followed; but fit succeeding fit, I removed the binder and all pressure from over the abdomen. The uterus contracted, but the fits continued. At 6 P.M. I gave her forty drops of the syrup of chloral in a little water. In ten minutes she fell asleep, and slept for nearly two hours. The fits recurred violently every hour till midnight, when I gave her a drachm of the syrup of chloral, which quieted her for an hour; then the fits returned, and continued during the night, sometimes three in an hour—almost continuous. Between the fits there was insensibility (with constant rolling of the head from side to side, pupils contracted) till 7 A.M. of the 18th, when I took 20 oz. of blood from her arm. The rolling of the head then ceased, the tongue quietly remained in the mouth, and she seemed much relieved. I painted the nape of the neck with liquor epispasticus, and she then first exhibited signs of returning sensibility by a sort of low, half-muttered groan. Abdomen distended with flatus, and relieved by well rubbing it with turpentine, and then applying flannels wrung out of hot water all over the surface. Pulse 130; skin hot and dry. Divided eight grains of calomel and one grain of opium powder into four powders, one to be taken every four hours; with half an ounce of the following saline mixture: solution of tartrate of antimony, half an ounce; solution of acetate of ammonia (concentrated), two drachms; water to four ounces.

Sept. 18th.—6 P.M.: Has had no fits since the venesection. She is partially sensible, but cannot express her feelings;

for when the legs were separated for the purpose of passing the catheter, she moaned and placed her hands on the vulva. No discharge from the vagina; belly tympanitic. Gave her an enema consisting of half an ounce of castor oil and half an ounce of spirit of turpentine, in thin gruel made with a fresh decoction of pennyroyal, which was retained till the

19th.—The patient micturated half the chamber-vesselful, the bowels being at the same time nicely relieved of a copious motion; a healthy discharge from the uterus commenced about the same time; pulse 120; swelling in the body disappeared. To have gruel, yelk of egg and beef-tea, new milk, &c.

20th.—I was sent for hurriedly, and found her in a state of wild delirium, supposing herself surrounded by snakes and enemies. It appeared that shortly after my previous visit some friends (?) called to see her, sat and talked a long time with her, and gave her some plums to eat. She became excited, said she was going to die, &c. Her pulse was 144; intense headache; hot, dry skin; uterus tender and painful on pressure. Gave her twenty grains of chloral hydrate in half an ounce of the saline mixture. She immediately fell into a quiet slumber, out of which I woke her to pour down her throat some fresh-made, strong beef-tea, and she went off to sleep again directly after. During the night, when awake, she had more beef-tea, and took also the yelks of eight eggs.

21st.—Calmer, yet delirious; great pain and tenderness over the uterus; pulse 130, and feverish. To repeat the chloral in the saline mixture, and the calomel-and-opium pill every four hours; hot fomentations and turpentine over the body. Great pain in her head, and quite blind when the head is raised.

22nd.—Pulse 125; less pain in the body; discharge healthy; passes water freely; bowels moved; pain in the head, with occasional delirium. Suspended all medicine, and continued support, which she takes freely—rabbit-broth, beef-tea, yelk of egg, milk, &c.

23rd.—Had a good night; no delirium.

From this date she steadily improved till Oct. 1st, when she sat up for an hour and a half, and on the 2nd for five hours, without inconvenience—sixteen days from the confinement, suckling her child the whole time.

New Malton, Yorkshire, October, 1870.

ON THE

ANTISEPTIC TREATMENT OF WOUNDS.

BY JOSEPH MORRIS, M.D., &c.

THE antiseptic question has been and is still the subject of much controversy. There are those whose dogmatic temperament leads them at once to treat with scornful disdain any new theory, without giving it a fair trial with a view to test its real value. But to my mind nothing is more remarkable than the success which attends the proper administration of the principles of the antiseptic treatment, as laid down by Professor Lister. I am fully convinced that the want of success, as recorded by some eminent surgeons, may be traced to the laxity with which the steps of the treatment are followed out.

In a very extensive colliery practice, in which wounds of all degrees of severity are of almost daily occurrence, I have had many opportunities of using carbolic acid, and the results have far exceeded my expectations. Indeed, I do not hesitate to say that, were the antiseptic treatment carried out efficiently, suppuration in primary wounds would ere long become a thing of the past. The absence of pus and rapidity of reparation in wounds may be looked for from the use of carbolic acid, as the two following cases will show.

A young lady, aged twenty-one, consulted me for malignant disease of the right mamma, of five years' standing, on the 5th of September. I removed the diseased mass in the ordinary way, thoroughly washing the exposed surface with a lotion of carbolic acid (1 to 20), bringing the edges together with sutures previously soaked in the lotion, dressing the wound with lint dipped in the same solution, and covering it over with a layer of tinfoil. The size of the wound may be imagined from the weight of the part removed, which was very little short of 2 lb.

Sept. 9th.—Dressing removed. Complete union has taken place, except a portion at the lower part of the wound an inch in length. The patient is well, and not suffering any ill effects from the operation.

14th.—Wound healed throughout. Patient able to take a long walk. Not the slightest signs of pus seen on the dressings.

Contrast this with a case operated upon by me twelve months ago, and in which water dressings were used. On the fourth day after the operation pus flowed copiously from the wound, and which continued more or less for five weeks. The breast removed in this case was not half the size of that removed on Sept. 5th. Both patients were alike favourable in general health for the operation.

On the 1st of this month a man came under my care suffering from a very large strangulated scrotal hernia. Every possible method was used to reduce, but without success. On the following day I relieved the strangulation, but without opening the sac. Carbolised lotion was employed, as in the former case. On the ninth day after the operation the wound had healed throughout; and, although I watched the case very carefully, I failed to detect the slightest sign of pus. Before the end of the second week the man was able to walk about and to bear the pressure of a truss.

On the 6th instant I was called to a woman suffering from severe injuries in the arm and head. On examination I found a large flap, the size of a man's hand when extended, breaking off the olecranon by the ulna, which was embedded in the flap, and completely laying bare the whole surface of the elbow-joint. The woman was also suffering from a severe scalp wound three inches in length. These wounds were the result of a blow from the sharp edge of a large iron fender. The wounds were washed with the carbolised solution, the olecranon brought into its proper place, and the same dressings were used as in the former cases.

Oct. 9th.—Wounds dressed. Scalp wound healed throughout. A slight clear watery discharge appeared on the dressings removed from the arm.

16th.—Arm dressed; union almost complete; no pus can be seen.

21st.—Wound healed. Passive motion used.

31st.—Able to use the joint with comparative ease.

Barnsley, Oct. 1870.

REMARKS

ON THE TREATMENT OF INCONTINENCE OF URINE.

BY WILLIAM THOMSON, M.D.

THE remarks by Mr. Yeo in THE LANCET of the 22nd of October, on the "Action of Belladonna in Arresting Nocturnal Incontinence of Urine," induce me to publish my recent experience in the treatment of that functional phenomenon.

Six months ago a patient informed me that her daughter, aged twelve, suffered from this complaint, but supposed medicine would not do her any good, as she had suffered from it for two years. She looked healthy, not at all anæmic, appetite good; in fact, enjoyed perfect health, with the exception of the frequent desire to pass water, and the inability to retain it during sleep. As I was anxious to show my patient that medicine would do good, I thought chloral hydrate likely to have the desired effect, at least in checking the nocturnal symptoms. I ordered her fifteen grains every night on going to bed, to fast from 7 o'clock till next morning, and to eschew beer and spirits. I did not see her for two days; when her mother informed me she was cured. The very first night she rested well, and did not get up once, instead of four or five times as formerly, besides wetting the bed nightly. She still had the desire to go frequently in the daytime. I ordered her, therefore, to continue the medicine for a fortnight, decreasing the dose to ten grains, which she then discontinued entirely, and was perfectly well when I saw her last week.

I felt delighted with the success of the chloral in this case, but waited anxiously for further trial, which, I am happy to say, came soon afterwards. I was applied to for a boy aged thirteen, who had nocturnal incontinence since he was six years old; but not the day symptoms. I gave him fifteen grains of chloral at bedtime. He slept well till five in the morning without his usual misfortune. At the end of a week I advised him to have some more medicine; but he said he thought he did not require it, as last night he omitted to take his dose, and all was well this morning. Continued the medicine a week longer—i. e., three weeks ago. Since then he has remained quite well.

Now here is a remedy most simple in its action, without any of the unpleasant effects of belladonna on the vision, &c. Where the case is merely one of habit, as both the above, we could hardly expect a more simple and efficient remedy than chloral, which, by its ensuring the bladder and sphincter vesicæ a quiet night's rest, enables them in a few days to regain their normal tone, and the patient his wonted vigour, so that he may retire to rest without his former dread of a disturbed night, or of awakening in the morning to find he is a defaulter to the laws of cleanliness and health.

Peterborough, Oct. 31st, 1870.

SUBAQUEOUS SURGERY.

(OPERATIONS UNDER WATER.)

Translated from the "Pabellon Medico," by

J. MULVANY,

ASSISTANT-SURGEON ROYAL NAVY, HASLAR HOSPITAL.

In the treatment of diseases of the closed cavities the impression that the entry of air is extremely hurtful has led to the employment of a great diversity of proceedings for its preclusion. A new method, which consists in operating under water, and avoiding the entrance of air afterwards by a perfect occlusion of the opening, is much lauded by Dr. Gritti, surgeon of the hospital at Meilat.

The patient is introduced into a large warm bath (the water reaching to a level with the part to be operated on), and the operation is effected as in the open air. Thoracentesis, punctures of dropsical joints, extraction of foreign bodies from the knees, subcutaneous division of tendons and aponeuroses, subcutaneous section of veins for the cure of varix, punctures of abscesses (hot and cold), have thus been practised.

Amongst other notable instances of thoracentesis the following will serve as an example:—

A woman aged forty, suffering from empyema of the left pleura (once already operated on in the ordinary way in the open air), was placed in a bath at 25° C. (77° F.) The left arm was raised, and the axilla being maintained on a level with the water, a large trocar was introduced between the sixth and seventh ribs, and exit given to a dense, yellowish liquid, which, slowly issuing through the aperture, became diffused in the bath. The deep inspirations provoked by coughing neither opposed any impediment to its flow nor caused the aspiration of water from the bath into the chest. The patient was but little incommoded by the sedentary position necessitated by the operation.

This case demonstrates the feasibility of the operation, but does not suffice to sanction its innocuity. Besides, all patients cannot equally sustain immersion in a warm bath, and it is presumable that violent accessions of cough may, by interrupting the flow of liquid from the chest, cause water to be drawn through the wound, and thus superinduce collapse of the lung (dyspnœa). Further experience is therefore required to test its value, and to point out the indications and contra-indications for and against its employment in empyema.

Similarly, in a case of hydrarthrosis, the knee being maintained on a level with the water, and compressed by the hands of an assistant, so as to render the capsule as salient as possible, the joint was punctured by a large trocar. (The patient was a painter, thirty years old, who had run the gauntlet of the Parisian surgeons without experiencing benefit from a most extensive application of remedies.) A sero-purulent liquid, containing creamy albuminoid, curd-like particles, escaped; and on the third day cicatrisation was complete, without accident. The liquid being reproduced, the patient did not wish for another operation.

A Mirror

OF THE PRACTICE OF

MEDICINE AND SURGERY

IN THE

HOSPITALS OF LONDON.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. MARY'S HOSPITAL.

CASES OF ABDOMINAL NEURALGIA; CLINICAL REMARKS.

(Under the care of Dr. HANDFIELD JONES.)

The following series of cases is interesting as illustrating the diagnosis and treatment of a disease that it is not always easy to distinguish from other affections in which pain is referred to the abdomen, especially peritonitis, lead colic, and hysteria. The points on which Dr. Jones chiefly insists appear to be—1. That the region of the abdomen, probably its peritoneal lining, is liable to suffer from neuralgia and hyperæsthesia, such as prevail in other situations more notoriously prone to this malady. 2. That such neuralgic affections may very closely simulate peritonitis. 3. That they may be attended with high temperature. 4. That they may possibly pass into peritonitis. 5. That, in their treatment, opium (preferably in the form of enema), tonics, and restoratives, prove to be successful remedies.

The first case is that of M. W——, aged forty, a married woman, who was admitted on the 9th September. She stated that three days previously she had been seized with pain in the lower part of the abdomen and the hips, so violent as to draw her double; since the day before admission it had been gradually subsiding, but with occasional aggravations. Whilst the pain was at its worst the abdomen had been so exquisitely tender that she could scarcely draw her breath, and whilst sitting up she had felt sick. On admission she flinched violently when the left side of the abdomen was touched, and she felt pain on coughing or drawing a deep breath; when she turned on to the right side she experienced a feeling of dragging in the left; the tongue was thickly coated with white fur; the pulse was 78, and not very weak; the temperature 99·3°; there was no blue line on the gums. The right side of the abdomen was resonant, the left dull, and these sounds were not altered when she moved on to her right side. She had no appetite, but was very thirsty; the bowels were habitually confined; the urine was very red, and passed with pain; there was also pain on passing her motions; the catamenia had not appeared for six weeks, but she had a profuse leucorrhœal discharge. There was no history of lead poisoning. She said that she lived over some stables, and had experienced a similar pain several times during the past three or four years; she felt very weak, and the least thing threw her into a "fainting perspiration." She had not been able to sleep during the previous night because dreadful sights appeared directly she closed her eyes "blood and all that sort of thing, mice running about," &c. The bowels were first relieved by an aperient, and then an enema containing twenty drops of laudanum was administered, and followed by a great abatement of the abdominal tenderness. The treatment was then made to consist of one-twentieth of a grain of strychnine, one minim of nitric acid, and ten of chloric ether, in an ounce of water, four times a day; with simple diet, a pint of milk, and four ounces of sherry. On the second day her sleep had been disturbed in the same manner as before; the abdomen was quite soft and only slightly tender. On the third morning the sleep had been sound and uninterrupted; the bowels

were relieved by an enema, and the diet was changed to chop, pudding, and porter, the medicine to twenty grains of the saccharated carbonate of iron, three times a day. On the seventh she was still improving, but, on getting up, the pain and feeling of faintness returned slightly. In a few days more she was discharged.

The second case was that of A. N——, aged twenty-six, a married woman with three children. She was admitted on Sept. 10th, and gave the following account of herself:—She was in charge of a house which had just been painted, and smelt strongly of paint and varnish, when, three weeks before admission, she was attacked with severe headache, which, two days later, was replaced by an abdominal pain which she described as having been "frightful" in severity, and since its onset she had been unable to lie on either side, or to obtain sleep at night. She had been feverish and without appetite. No other inmate of the house had been out of health. She looked thin and anæmic, had a copious leucorrhœal discharge, and was suffering such intense pain that six leeches were immediately applied to the abdomen, and followed by poultices. On the 13th Dr. Jones found her very weak, complaining of great pain on the left side of the abdomen, but lying with the legs extended; the left flank of the abdomen was dull on percussion; the other regions were resonant. The pulse was 102, not very weak; the temperature 102·5°; the tongue moist. There was no flush on the cheeks nor eruption on the abdomen. The bowels had not been open for two days; the appetite was good; the breasts did not secrete much milk. She was ordered an enema of castor oil, to be followed, after the action of the bowels, by a simple enema containing twenty drops of the tincture of opium; also a draught of four grains of carbonate of ammonia and one drachm of tincture of bark, in an ounce of decoction of bark, three times a day, with a generous spoon diet. On the fourth morning she awoke in great pain from a sleep which had lasted from early in the previous evening. The pulse was 105; the temperature 103·4°. The abdomen was fomented, and another opiate enema administered, and she was ordered twenty grains of the saccharated carbonate of iron thrice daily, in addition to the draught. On the seventh day the pulse was 88, the temperature 99·7°, and pain of a much less severe character recurred from time to time. The diet was changed to one of meat and porter. On the eleventh day the temperature was 100°, and, in consequence of copious night-sweats, the ammonia-and-bark draught was abandoned for one containing four grains of quinine. Subsequently a chloride-of-zinc injection was made use of to check the leucorrhœa. Twenty-eight days after admission she only complained of an occasional return of pain towards evening. No blue line was observed at any time on the gums.

The third case was also a woman, thirty-three years of age, and single. She stated that she had been indisposed for a fortnight, and had kept her bed for a week. The first symptom had been pain at the upper part of the abdomen, all round it, and in the back, great pain also followed on taking food, and was relieved by vomiting. At the time of admission the pain seemed to be violent; she was found to be bending herself down and moaning; the tongue was moist, and tolerably clean; the pulse 80; the temperature 97·5° F. The abdomen moved a little in respiration, but the muscles were at times very hard and tense; there was no eruption. She had no appetite, but was very thirsty. On inquiring into her history, it was elicited that seven years before she had lived in a house whilst it was being painted, and that she suffered at the time some nausea; also, that two years before admission she had suffered for a short time a somewhat similar kind of pain. The teeth were found to be so encrusted and soiled with tartar that it was difficult to determine whether or not a blue line was present. She also complained that for a year she had had pain about the rectum, accompanied by a frequent desire to defecate; but she had never experienced any pain during the passage of her motions. The uterus was found to be reclined, the fundus lying near, if not upon, the rectum. She was first ordered a grain of opium every four hours, ice to swallow, poultices to the abdomen, and a subcutaneous injection of ten minims of solution of opium; but neither these remedies, nor an opiate enema which had been administered, were found on the following day to have afforded relief. She was found to be twisting and writhing in bed, although the abdomen bore pressure fairly well. The pulse was 72, and not weak; the urine clear and of high colour. She was then ordered a drachm of tincture of valerian and four grains of carbonate of ammonia, in an ounce of infusion of valerian, thrice daily; but she obtained no sleep during the following night, severe pain being excited every time she moved; and, in the morning, the abdominal walls were found to be hard and retracted. The temperature was 98·9° F. An opiate enema was followed by relief, and a grain of opium was ordered to be taken every two hours. On the eighth day two grains of iodide of potassium were added to the draught. On the fifteenth she was ordered, in addition, twenty grains of saccharated carbonate of iron, thrice daily. On the sixteenth day the pains became regularly paroxysmal, returning morning and evening at half-past ten o'clock. On the same date she began to sweat a great deal at night; ten grains of quinine daily, in two evening doses, reduced the severity but not the duration of the attacks. The amount of quinine was then doubled by giving four doses daily instead of two, and by the twentieth day she was free from pain and improving in general condition. After this the pains returned slightly, and a treatment as for lead colic was essayed, but, proving unsuccessful, was changed for citrate of iron and quinine, under which they soon began to disappear; and within little more than a month from the date of admission, though the patient suffered occasional returns of pain, the abdomen was soft and mostly quite free from tenderness on pressure, and she was discharged at her own request.

These cases, Dr. Jones said, were fair specimen cases of a disorder which is by no means rare, at least among the poorer classes. In calling it "abdominal neuralgia" he had followed unwittingly the example of the late Dr. Addison, who had written a very full and interesting paper on the same disorder in connexion with uterine irritation. The term might be thought too vague, but he preferred it to any other, for the reason that it did not appear to him that any organ is specially affected, and that any part of the region in question might be attacked. If he were pressed to localise the disorder more exactly, he should name the peritoneum as the most probable seat, partly on account of the quality of the pain, partly because this membrane is coextensive with its situation. Romberg had described a hyperæsthesia of the mesenteric plexus, but the description he gave of it seemed more applicable to colic than to the malady they were considering. A perusal of the cases, Dr. Jones thought, indicated that the resemblance of the symptoms, especially the pain, to those of peritonitis was quite close enough to make the diagnosis sometimes sufficiently difficult. Dr. Addison had said that the pain occasionally attacked the whole of the belly, exactly simulating acute peritonitis, and that he knew of no more puzzling disease. The points which would prove most serviceable as guides were the previous history, the temperature, the posture, the respiration, the pulse, and the physical signs. If the patient appeared to have suffered from any cause of exhaustion, such as lactation, profuse leucorrhœa, overexertion, semi-starvation, or the like, a neurosis was a more probable result than inflammation. If the disease was of long duration, such as from two to three weeks or more, and the pain persisted with severity, especially without the development of any other symptom, it could not be peritonitis; the same would probably apply if there was a history of several similar previous attacks. If the temperature underwent no rise, it afforded strong evidence against the existence of inflammation, though a high temperature could not by any means be taken to prove the converse. The second case indicated a temperature befitting typhoid fever, and it was only the sequel which conclusively showed that the pain was purely neurotic. It had been supposed that neuralgia could not coexist with pyrexia, but he had recently seen a case of epbemeral fever in which the patient complained of agonising pain in the limbs, and the temperature rose to 103°; on the day following the pain had greatly abated, and the temperature was found to be normal. As regarded posture, the peritonitic patient was said to lie in a fixed position, instinctively avoiding the slightest movement; the neuralgic often turns and writhes about: the former abstains from using the diaphragm in respiration, the latter does not, or, at any rate, not to so great an extent. After a few days the physical signs would probably afford decisive

information. The dulness in depending parts of the abdomen, due to effusion, is not present in neuralgia. So, also, abdominal distension may be looked for in peritonitis, but not usually in neuralgia; though Dr. Addison speaks of a very marked instance of the latter, in which the belly was as tense as a drum and exquisitely tender. The case had been regarded as one of chronic peritonitis, and the surface of the abdomen "presented a most singular appearance from the thousands of leeches" which at various times had been applied. A very important question might be raised—viz., whether a primarily neuralgic disorder may not pass into an inflammatory. Dr. Jones's belief was that it might, and though he had not observed it in abdominal cases, yet there was considerable evidence, he thought, that such a change may occur in facial neuralgia. For further remarks on this topic he referred to his work on the subject. Some might be disposed to look upon these cases as examples of hysteria, and would have summarily dealt with them by the treatment which Sir T. Watson recommends—namely, purging, followed by an assafœtida enema. To this he altogether demurred. If any definite meaning was to be attached to the term hysteria, it must imply that the patient's will was defective, that she was not sincerely anxious to get well; that, in fact, she wanted moral treatment more than medicinal. Such, he was satisfied, was not the case with the patients in question. The pain felt was, as far as he could judge, as *bonâ-fide* a pain as ever racked a sufferer from sciatica or tic douloureux; they recovered speedily, and under such treatment as was known to benefit neuralgia elsewhere.

The occurrence of some amount of nocturnal delirium, and that of a terrifying and distressing kind, in the first case, Dr. Jones added, deserved remark. Such disorder was, if he might use the term, quite *homogeneous* to neuralgia, both affections having their root in a feeble paretic state of nerve-centres, and being, as it were, branches of the same stock. The derangement, in fact, was of the same kind in both, and the diversity of phenomena depended on the site of the morbid action; the intellectual centres being affected in the one case, the sensory in the other. There were also indications that the vaso-motor nerve-centres were involved, and suffered in a like way; for the patient in the first case complained of "faint perspirations"—i. e., perspirations attended with a sense of faintness; and in the second, of copious nocturnal sweating, precisely such as is met with in maladies of exhaustion.

Another noteworthy point observed, especially in the first case, and which Dr. Jones said he had not unfrequently met with in other unquestionable neuralgias, was the reproduction of the pain by exertion. This depended on the fact (for such he held it to be) that consumption of nerve-force in one centre, or, to speak more correctly, of material qualified to generate nerve-force under oxidation, diminishes its production in another, and so favours the recurrence of a disorder which is essentially dependent on the failure of nerve-force.

The special cause of the disorder in these cases could not be said to be clearly ascertained. It might be thought that the second was one of lead-poisoning, as the patient had been exposed to the smell of paint; but he could not take that view. There was no notable constipation, and no blue line on the gums. The pain was not like that of colic; it was attended with fever, followed by copious night-sweats, and cured by tonics. He had never seen anything like this in the frequent cases of lead disease he had met with. The lactation and leucorrhœa no doubt had materially promoted the action of the exciting cause.

The diagnosis once made, the remedies to be used were plain. Opium to relieve suffering, tonics to restore strength, the action of both being *led*, rather than seconded, by repose and good nourishment. In doubtful cases, after ascertaining that the bowels had been sufficiently cleared, he advised the use of an opiate enema before applying leeches. The result of this means might be so satisfactory as to make the further treatment clear. On the other hand, it was to be observed that in a puzzling case Dr. Addison thought it an error on the right side (for an error it proved to be) to employ the remedies for peritonitis. The few leeches which were applied in the second case gave relief; but he, nevertheless, thought they were unnecessary and undesirable. It was by no means impossible for such means, by the temporary benefit they produce, to betray the practitioner into their repetition, with ultimately disastrous consequences.

CHARING-CROSS HOSPITAL.

A CASE OF ANEURISM OF A BRANCH OF THE PULMONARY ARTERY CONTAINED IN A TUBERCULOUS CAVITY IN THE LUNG; HÆMOPTYSIS; DEATH.

(Under the care of Dr. HEADLAND.)

We are favoured with the notes of the following case by the registrar, Mr. Ralfe.

Mary Ann E——, aged eighteen, was admitted Oct. 17th, suffering from profuse hæmoptysis. Her friends stated that for the last nine months she had been troubled with a cough, with copious expectoration, and night-sweats. About three weeks before, she brought up a quantity of blood after a prolonged fit of coughing. Though the hæmoptysis was arrested by treatment, the sputa had continued to be more or less stained. On the evening preceding her admission she had had another very severe attack of hæmoptysis. The pulse was found to be 84, the respiration 34. Coarse bubbling rhonchus was heard over the apex of the left lung; a constant suffocating cough was accompanied by the expectoration of frothy fluid blood, and altered blood was frequently brought up from the stomach. She was ordered three grains of acetate of lead in an ounce of water, every two hours, and an ice-bag to be applied to the chest. The acetate of lead seemed to check the hæmorrhage; and after the patient had been in the hospital a few hours, the quantity of blood expectorated underwent a sensible diminution.

On the third morning after admission the hæmoptysis recurred, and continued for some hours, but was again arrested by the acetate of lead. Early on the fifth morning she appeared to be choking; and the nurse sent for the house-physician, who found a large coagulum blocking the larynx. This he withdrew, but the patient died shortly afterwards.

At the post-mortem examination the apex of the left lung was found adherent to the parietal pleura, and in removing it from the thorax a rent was made in it which exposed a cavity of the size of a man's fist; on slitting up the lung another cavity was found below the first, near the posterior border of the lung, just above its roots, and opening posteriorly into a large bronchus. This cavity, which was of the size of a walnut, contained a body in size and colour exactly resembling a morella cherry, into which a fair-sized probe was easily passed through an artery, to which it was connected; the cavity containing this body opened posteriorly into a large bronchus. The right lung contained a few scattered tubercles. The heart and other organs were normal.

In commenting upon the case Dr. Green said that small aneurismal dilatations of branches of the pulmonary artery are by no means rare in phthisis; that several cases had been recorded, and many more would probably be observed if the lungs were carefully examined in all cases of death from hæmoptysis. In accounting for the dilatation of the arteries in these cases, the damage done to the walls of the vessels by the process of softening, and the additional pressure brought to bear upon them by the occlusion of others by the tubercular growth, were especially indicated.

GUY'S HOSPITAL.

OPERATIONS BY MR. COCK.

The following operations were performed on the 11th inst., by Mr. Cock.

Amputation of the Thigh.—The subject of this operation was a boy of about ten years of age. He presented an emaciated appearance, and the left thigh and leg were especially wasted. The corresponding knee, of which the skin was perforated by a number of fistulous ulcerations, was swollen to about the size of a cocoa-nut. Mr. Cock said that when the boy was first brought to him, he appeared to be suffering from some periosteal inflammation of the lower part of the femur. He was brought to him again shortly afterwards, and found to have an abscess of the knee-joint with considerable disorganisation. This condition, Mr. Cock thought, was probably due to the formation of an abscess in connexion with the periosteum, which had burst into the joint. Since his admission into the hospital the discharge from the part had been very

considerable, and though no disease either of the lungs or kidneys could be detected, the loss of flesh had proceeded so rapidly that removal of the limb appeared to offer the only chance of saving his life. Resection, Mr. Cock said, was inadmissible in this case, if for no other reason, because of the extensive damage which the bones and integument had suffered. He should not, however, fear to carry his incision through the walls of the abscess, because he should bring the flaps together in such a way as to permit the free discharge of pus. The stump was enclosed, from the trunk downwards, in bands of a kind of linen strapping, peculiarly well adapted to the purpose, and made specially for the hospital. It does not require to be heated before it is applied, and though so soft and flexible as to be very unlikely to cut or otherwise damage the skin and to be easily adapted with accuracy, it is very substantial and strong.

After another operation, which consisted in the removal of some necrosed bone from the neck of the humerus of a boy, in whose arm an abscess had followed a blow on the part some time previously, Mr. Cock pointed out some cases in the wards. Among these was a successful case of skin-grafting on to an ulcer of the leg of twenty years' standing, following necrosis of the tibia, which had several times before been unsuccessfully treated at the hospital.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, NOVEMBER 8TH, 1870.

DR. BURROWS, F.R.S., PRESIDENT, IN THE CHAIR.

ON THE ELECTROLYTIC TREATMENT OF HYDATID TUMOURS OF THE LIVER.

BY C. HILTON FAGGE, M.D., F.R.C.P.,
ASSISTANT-PHYSICIAN TO GUY'S HOSPITAL, AND PHYSICIAN TO THE EVELINA HOSPITAL FOR SICK CHILDREN;
AND
ARTHUR E. DURHAM, F.R.C.S.,
ASSISTANT-SURGEON TO, AND LECTURER ON ANATOMY AT, GUY'S HOSPITAL.

THIS paper is based upon eight cases of hydatid disease of the liver successfully treated by electrolysis. The authors believe that this method of treatment has not hitherto been adopted in any other case of the same nature in the human subject.

The operation was performed in the manner recommended by Dr. Althaus in his treatise "On the Electrolytic Treatment of Tumours." In each case two needles were passed into the tumour, and were connected with the negative pole of a modified Daniell's battery of ten cells. The positive pole, terminating in a moistened sponge, was placed upon the surface of the abdomen. The current was allowed to pass for a period varying from ten to twenty minutes, in different cases. The needles were then withdrawn. A little clear fluid in some cases appeared at the seat of the punctures.

No preliminary tapping nor exploratory puncture was made in any case. The diagnosis rested on the facts that the patient had a rounded, elastic tumour projecting from the liver, and that this was *cystic*, as proved by the needles rubbing freely against one another in its interior, although introduced an inch or two apart.

The operation was followed in most cases by rapid diminution of the tumour, which even shortly after the operation became soft and flaccid. At the same time, in some cases, fluctuation became perceptible in the lower part of the abdomen. The authors believe that some of the hydatid fluid probably escaped through the punctures made by the needles, having been possibly forced out by the accumulation of hydrogen gas in the interior of the cyst. The success of the operation would thus appear to depend, not on the direct action of the electric current, but on its effecting, as it were, a kind of subcutaneous tapping; and they suggest that simple acupuncture might possibly be followed by equally successful results.

Slight febrile symptoms, and more or less pain, in most cases followed the operation; these symptoms, however, rarely lasted more than three or four days. In one instance they were entirely absent. In most cases the patients were able to get about in a few days, and some of them were discharged from the hospital at the end of two or three weeks. Even at this early period the tumour had already, in some cases, very manifestly decreased in size; and, as a rule, this decrease, when once it had fairly commenced, steadily progressed. After the lapse of six months or a year, when each patient returned for examination, no trace of the disease remained; or, at most, there was only some ill-defined fulness of the epigastrium.

In one case only the result still remained doubtful. In the remaining seven cases the favourable issue above described had already taken place. All the patients were in perfect health. In each of them the tumour had been large, and in at least one instance it had reached quite unusual dimensions. In three cases more than one cyst existed, and each cyst had then to be electrolysed separately. In the latter part of the paper the results of electrolysis are compared with those of simple tapping—the operation which has hitherto been most successful in the cure of hydatid disease of the liver. The authors claim for electrolysis that it rivals simple tapping in being unattended by immediate danger to the life of the patient, and that it is to be preferred, inasmuch as (according to their experience up to the present time) it involves no danger of suppuration within the cyst, and consequent risk and suffering—results which often follow simple tapping. The authors conclude their communication by referring to a case in which Dr Playfair, in accordance with their suggestion, treated an hydatid tumour of the liver by simple acupuncture. The results of this case promised to be favourable; but as yet sufficient time had not elapsed to warrant any decided expression of opinion.

DR. ROBERT LEE had met a case four years ago. The patient, a lady from Calcutta, had an abdominal swelling which was said to be ovarian, and she was sent home for operation. By chance she consulted him, and he diagnosed pregnancy. Another, however, diagnosed hydatid tumour of the liver, and recommended puncture. The case went on, and she was delivered; but a tumour was left behind which was still pronounced to be ovarian. Puncture caused it to shrink, and it did not recur.

MR. HULKE said that years ago Dr. Budd had tapped a hydatid cyst, but only a few drops of fluid came away. Some years after the woman died in childbirth, and a shrunken cyst was discovered.

MR. BARWELL asked why two needles were employed, and why they were connected with the negative pole.

DR. ALTHAUS was glad to find that his suggestion had turned out well, as the treatment by tapping had not been very successful. If electricity was not required, it was good that acupuncture should be employed. Two needles were employed to extend the disengaging surface, and the negative pole was used as developing hydrogen, not oxygen.

DR. MURCHISON said it would seem that fluid had escaped from the cyst, and yet no bad action had been set up. Was it advisable to allow the fluid to percolate into the peritoneum, or to allow it to escape? Suppuration generally followed secondary enlargement after tapping. This enlargement generally subsided of itself. The entry of air into the cyst depended on the care taken in tapping, and the use of the aspirator would prevent its entrance.

After brief replies from Dr. Fagge and Mr. Durham, the meeting was made special, to consider the amalgamation scheme, the result of which has been already detailed.

CLINICAL SOCIETY OF LONDON.

FRIDAY, NOV. 11TH.

MR. PAGET, PRESIDENT, IN THE CHAIR.

MR. POLLOCK read particulars and exhibited several cases of Skin-grafting and Skin-transplantation. In relating the particulars of the first case in which skin-grafting had been attempted in this country, he stated that in 1869 M. Reverdin originated in Paris this method of treating large ulcerated surfaces. In May, 1870, the author first heard of M. Reverdin's experiments, and at once decided to test the treatment. A girl, eight years of age, had been in St. George's Hospital for some three months and a half, with an extensive open burn of the right thigh, of more than two years' duration. The ulcerated surface extended from

the buttock to the knee—broad above, and ending almost in a point below. Mr. Pollock at first transplanted two small pieces of skin about the size of millet seeds, taken from the lower part of the abdomen. Subsequently three, and again other pieces, were transplanted at various periods—in all, about fourteen pieces had been transplanted. The child was exhibited to the members of the Society, and it was seen that this extensive burn was nearly healed, in a period little over five months, without any perceptible contraction of the cicatricial tissue originated by the transplanted skin. The child had greatly improved in health as the progress of cicatrisation had advanced. In this case two pieces of black skin had been on one occasion transplanted to the ulcerated surface, and became attached; when increased in size, the area of the pigment deposit had considerably increased in one of them, although the whole of the cicatricial tissue due to the transplantation of this portion of skin was not generally dark coloured. The sore was attacked some time after by sloughing, which was chiefly confined to the portion in which the black skin had been engrafted, and unfortunately destroyed the whole of the cicatrix due to this transplantation. Mr. Pollock made some general remarks with respect to the mode of transplantation, and the conditions requisite to the success of the operation. He usually transplanted very small pieces, similar to the plan pursued by M. Reverdin, and considered it essential to the success of the operation that the surface of the granulations should be in a healthy state. In some cases the operation had entirely failed, in consequence of the state of the sore. In other cases, though the piece transplanted had become attached and vitalised, yet, owing to the state of the patient's health, it had remained stationary, and gave no sign of increase. Mr. Pollock, in conclusion, thought a tribute of admiration and gratitude was due to M. Reverdin from the profession for the boon he had conferred upon surgery by the introduction of this original method of dealing with large and obstinate ulcers.

Mr. LAWSON read a paper "On the Successful Transplantation of Portions of Skin for the Closure of large Granulating Surfaces." He exhibited two patients in whom this mode of treatment had been attended with satisfactory results, and related the history of a third who had been equally benefited by the method of transplantation. In one patient a large ulcer of the leg, which had resisted all treatment for over four years, was completely closed in a few weeks after a piece of skin the size of a fourpenny-piece had been planted on it. As soon as the new skin had established its vitality, granulations sprang from the circumference, and rapidly closed-in the wound. In another patient the results were equally satisfactory. In a third case Mr. Lawson formed a new eyelid for a patient who had a complete ectropion of the upper lid. He dissected the lid from its attachments, pared at two points the corresponding tarsal margins, and united them by two fine sutures, and thus obtained a fixed level surface upon which to transplant a portion of skin. The parts were then left, and on the fourth day, when the wound was covered with healthy granulations, he transplanted a piece of skin of the size of a threepenny-piece, and two days later another portion, of the size of a silver fourpenny. Both pieces rapidly united to the granulating surface, and the space between them was speedily filled up with new cicatricial tissue. A new lid was thus formed, which was sufficient to protect the eye from exposure; but the presence of two pieces of skin, different in appearance to the ordinary eyelid integument, gave to the patient a peculiar and rather unsightly look. In each of these patients the skin which was engrafted not only soon became vascular, but acquired sensibility, and after ten or twelve days could appreciate the slightest touch with a blunt instrument. The conditions which Mr. Lawson found essential for the operation were:—1. That the new skin should be applied to a healthy granulating surface. 2. That skin only should be transplanted, special care being taken that no fat adhered to it. 3. That the portion of skin should be accurately applied to the granulating surface. 4. That the new skin should be kept in position without interruption, and that it should be lightly covered with a layer of lint, and over that a small compress of cotton wool, and a bandage, for the purpose of maintaining its warmth, and thus to assist in retaining its vitality until it had established its new life.

Mr. CROFT mentioned a case in which he had transplanted a piece of skin a quarter of an inch square on to a large granulating sore of the leg. Eleven days afterwards it had doubled in size, and was now progressing very quickly towards recovery.

Mr. FRANCIS MASON remarked that the size of the pieces which were transplanted was worthy of special consideration; that, according to his own experience, pressure was important, and he regarded several failures that had occurred as due to the difficulty of obtaining this condition satisfactorily, on account of the situation of the parts treated.

Mr. CARTER asked Mr. Lawson if a better result might not have been obtained by transplanting a small piece from the other eyelid, so as to preserve the natural delicacy of the skin of the parts.

Mr. GANT agreed that the similarity of texture on both sides of the body was worth recollecting in these cases.

Mr. SPENCER WATSON gave brief particulars of cases that had come under his notice at the Great Northern Hospital, and considered that the success of the operation depended very much in keeping the transplanted pieces in position.

Mr. HENRY ARNOTT spoke of a case in which two ulcers existed, one having been treated by transplantation and the other left alone; both closed pretty much at the same time; and, in reply to Mr. Heath, said that the case was one of keloid, following a burn.

Mr. REEVES thought that large pieces of skin should be transplanted.

Mr. ARTHUR DURHAM eulogised Mr. Pollock and the operation, and said that in a case of pigmentary nævus that had come under his care it was positively beautiful to see the islands of skin joining the mainland and the processes of repair proceeding so rapidly.

Mr. CALLENDER quoted cases under the care of Mr. Pick and Mr. Willett, all of which had done well; and in reply to a question from Mr. Heath, said in all the cases cited, the ulcer was, as far as he knew, of the usual tertiary syphilitic form.

Mr. POLLOCK closed a long discussion by briefly explaining his own views as to the physiological aspect of the question, and as to the success of the operation in syphilis, and regretted that the state of Paris had prevented any recent intercommunication with Dr. Reverdin, the talented author of the operation. According to his own experience, and particularly with rupial sores, small pieces of skin answered as well as large; and, in this matter, some consideration should be shown to the patient.

Mr. THOMAS SMITH exhibited a very interesting case of sore resulting from recent vaccination. This case attracted a great deal of attention, and at the suggestion of the President, Mr. Gascoyen, Mr. Callender, and Mr. Berkeley Hill were requested to act as a committee for the purpose of reporting upon it.

MIDDLESEX HOSPITAL MEDICAL SOCIETY.

THE first meeting of this Society was held on Thursday evening, November 3rd, in the board-room of the hospital; Mr. Morris, M.A., M.B., the president, in the chair.

In a few introductory remarks the Chairman congratulated the members upon the prosperous condition of the Society, and alluded to the advantages accruing from such societies by engendering a careful and intelligent system of preparatory reading in those who take part in the proceedings, and a definiteness of thought necessary for the verbal expression of opinions. He then urged upon those who were going to read papers the desirability of choosing general subjects, which admit of being discussed from an anatomical and physiological as well as from a clinical and pathological point of view, so as to permit of junior as well as senior members taking an active interest in the debates.

Mr. CLARKE, the house-surgeon of the hospital, then proceeded to read a paper on "Transplantation as a mode of treating Ulcers," in which he alluded to the facts which had suggested the process to the mind of its originator, referred to the different modes of applying the method, and the steps of the process as apparent with the aid of a powerful lens and to the naked eye, and described briefly several cases he had seen under treatment in the wards of the hospital. He expressed a hope that by the wide use of this treatment there would be a great diminution in the

frequent applications at the out-patient department of hospitals for the relief of chronic ulcers, which, by their obstinacy, so tried the patience and resources of those who had to deal with them; and he suggested that in cases of extensive destruction of skin over surfaces such as the abdomen and back, not only the skin of other persons but even the skin of other animals might be engrafted to promote healing.

Several members afterwards took part in the discussion, and the meeting terminated, promising well for the success of the present session.

ARMY MEDICO-CHIRURGICAL SOCIETY, PORTSMOUTH.

THE opening meeting of this Society for the present session took place on the afternoon of the 2nd inst., at the Garrison Hospital, Portsea. Staff Surgeon J. M. HYDE occupied the chair, and there was a good attendance of garrison medical officers. The proceedings commenced by the chairman expressing in a few words the regret he and all the members of the Society felt at the absence of Dr. Gordon, C.B., from his usual post as president of the Society, and how inadequately he felt he could now temporarily fill his place. However, he could only wish Dr. Gordon success and distinction in the service on which he had been sent, and from which they all hoped he would soon return safe and well. He then announced the session 1870-71 to be opened, and expressed a hope that it would be as successful as the last and previous ones.

Dr. O'LEARY (honorary secretary) then read the proceedings of the last meeting, which was held in July last, when the following gentlemen were elected to serve on the committee for this year:—Staff-Surgeon Major Dr. A. D. Home, C.B., V.C., president; Surgeon J. Stratton, 77th Regiment, and Staff Assistant-Surgeon E. F. O'Leary, M.D. (honorary secretary), members.

Staff Assistant-Surgeon CLIMO, M.D., then read notes of a fatal case of Aneurism, which occurred in the person of a soldier of the 77th Regiment in garrison, and made a few remarks on the peculiar nature of the case in a medico-legal point of view, and the causes which make this disease so prevalent among soldiers.

The Honorary Secretary read a paper on an outbreak of Cholera which occurred at Mean Meer in 1861, by Surgeon O'Nial, 51st Light Infantry.

A very interesting discussion ensued as to the nature of this formidable disease, and as to the mode in which it propagates itself.

Reviews and Notices of Books.

Auscultation and Percussion; together with the other Methods of Physical Examination of the Chest. By SAMUEL GEE, M.D., Assistant-Physician to St. Bartholomew's Hospital and to the Hospital for Sick Children. Small 8vo, pp. 299. London: J. Walton. 1870.

THIS is an addition to the many works already published with a view to enable the student to master the details of the physical examination of the chest in health and disease; but it is a welcome addition, inasmuch as it has evidently been prepared with great care, and is well up to the level of modern research in reference to the subject of which it treats. The book is divided into two parts: the first treats of the physical signs in the abstract—the pure science of the physical signs,—and includes an account of their character and their mode of production; the second deals with physical signs as indicative of disease—the applied science of physical signs. We are glad to note that Dr. Gee starts in every section by giving the reader a clear and concise account of the conditions of health by which to compare morbid sounds and signs; and he has illustrated the healthy and diseased shapes of chests by numerous diagrams, which will be of great assistance to the student. The physical signs proper to individual diseases of the lungs and heart are well and tersely put. We are much pleased with Dr. Gee's little work, and recommend it to the student with every confidence.

St. Thomas's Hospital Reports. New Series. Vol. I. pp. 706. London: Churchill and Sons. 1870.

THIS is a very handsome volume of Hospital Reports, and contains some very good papers. Dr. Stone contributes an opening article, giving a history of Old St. Thomas's Hospital. Dr. Peacock follows with "Remarks on the different forms of Pulmonary Consumption." Mr. George Rainey, in some thirty pages, discusses the existence of continued currents in fluids, and their action in certain natural physical processes, the object of which is to show, by the results of a series of experiments, that the particles of fluids, even under circumstances where they might be thought to be most at rest, are in constant motion, describing among themselves circular or elliptical currents. These currents are found to be due, not to evaporation or chemical action or varying temperature, but to the action of certain forces in operation in the tendency of small quantities of fluid to assume sphericity of form. Mr. Rainey applies the facts he has observed to the explanation of the "diffusion of fluid," the phenomena of molecular movement, and of exosmose and endosmose. There are two good papers by Dr. Bristowe, the one on the "Mechanism of Articulate Speech," and the other on the "Vegetable Parasitic Diseases of the Skin," illustrated by several figures of the fungi. Dr. Bristowe gives some noticeable facts which tell against the parasitic nature of tinea decalvans. Infantile Paralysis is the subject of a paper by Mr. Barwell. Dr. Clapton gives the results of his investigations into the Action of Quinine. Mr. Spencer Wells furnishes a paper on the Operation for the Cure of Vaginal Fistulæ; Mr. Allingham, on Lumbar Colotomy, with cases; Dr. Ord on experiments relating to the Forms assumed by Uric Acid; Dr. R. Barnes an elaborate clinical inquiry into Uterine Hæmatocele; Mr. Carr Jackson on Lithotomy; Mr. Wagstaff on Temperature in Shock; Mr. Sydney Jones on Diseases of Joints, &c. The matter is as good as the variety.

Report by Dr. Buchanan and Mr. J. Netten Radcliffe on the Construction of Midden Closets used in various Northern Towns. Privy Council Report.

THIS very able report has not attracted the attention it deserves. There are no doubt doctrinaires ready to denounce any attempt to construct a midden which shall meet the requirements of sanitary science. It may be said that the watercloset is a contrivance perfectly well adapted to the wants of civilised human beings, and that any proposal whatever to construct a privy, however wholesome, is a step in the wrong direction. But it should be remembered that two important preliminaries are required to the successful introduction of watercloset—namely, a good supply of water, and a perfect system of sewers. These requirements are so costly that it has taken the best part of half a century to bring them even to a moderate state of perfection in the largest towns; and we may very reasonably expect that at least another generation will pass away before they can be made available even for the secondary towns. In the meantime are the people to be left to die of the diseases which are caused by unwholesome privies? Amidst a controversy as to the advantages of earth-closets and watercloset, are we to lose sight of the fact that by necessity whole communities are still storing up excreta under their windows, and constructing privies, as if sanitary science had not advanced one step? The object of the inquiry is, therefore, most important. The report describes the new

plans which have been adopted in modification of the old midden, or in substitution for it, and what amount of success has attended each of them. And we regard it as a most important point that the reporters are able to indicate arrangements by which human excreta can undoubtedly be dealt with, not only without violating the laws of health, but without pecuniary loss to those who adopt them.

The report includes a description of the system pursued at Manchester, Salford, and Rochdale. With respect to the last-named town the reporters confirm the conclusions at which our own commissioner arrived; indeed they point to Rochdale and Hull as instances in which the evils inseparable from the midden system are reduced to a minimum by removing the contents systematically and frequently.

Space does not permit us to do more than recommend this report to architects and sanitary authorities, as from it the advantages found in the various towns may be combined and modified according to the circumstances of the locality, or the character of the population.

OUR LIBRARY TABLE.

Transactions of the Obstetrical Society of London for the year 1869. Vol. XI. London: Longmans, Green, and Co. 1870.—This volume is a creditable one; it includes papers on every variety of subjects of importance in the obstetrical department of practice. We would especially mention that of Dr. Barnes on "Uterine Hæmorrhage and its treatment by Perchloride of Iron"; a paper on the "Uses of the Styptic Colloid in cases of Ulceration of the Cervix Uteri"; the subject of "Infant Mortality"; a paper by Mr. Spencer Wells on the "Complication of Pregnancy with Ovarian Disease"; a contribution on "Puerperal Convulsions," by Dr. J. Hall Davis; "A Case of Amputation of the Cervix Uteri," by Dr. Meadows, &c. None of these subjects are exhausted in the papers mentioned; but the contributions generally are clinical, and of the nature of facts.

St. Bartholomew's Hospital Reports. Vol. VI. London: Longmans. 1870.—This annual volume consists of only 156 pages of letterpress, but is well "padded" with statistical tables, &c., which can be of little general interest to the bulk of the subscribers. The members of the senior surgical staff have all contributed papers of more or less interest, but the senior medical staff is conspicuous by its absence. This is the more surprising, as our reporter for the Hospital Mirror of THE LANCET is not unfrequently met, when asking for notes of interesting cases in the wards, with an expression of regret that they must be kept for the "Hospital Reports"; and this applies not only to St. Bartholomew's, but to other hospitals in which the system of annual reports has been introduced. Certainly the volume before us very meagrely represents the practice of a great institution like St. Bartholomew's; and many of the articles are contributed by gentlemen who have no connexion with it whatever—notably Professor Turner of Edinburgh, and Dr. Ormerod of Cambridge.

Notes of a Naturalist in the Nile Valley and Malta. By ANDREW LEITH ADAMS, M.B. Edinburgh: Edmonston and Douglas. 1870.—The author of this volume is known as one of those energetic enthusiastic men occasionally met with in the public service, whose *hora subsecivæ* are employed in observing and exploring everything in the neighbourhood in which they may happen to be. With a gun or a geologist's hammer, a spirit of inquiry, and a fair general knowledge of natural history and geology, it may be readily understood how an army surgeon may make a good use of his time and opportunities. The book contains all that is known about the geology of Malta—and a good deal has been brought to light of late years by the persevering labours of the author himself in this direction,—besides some interesting notes on Egypt and Nubia, about the climate, natural history, geology, and antiquities of those parts, with some practical hints and advice to the Nile invalid which that individual may well read with advantage.

A Book about Shams · relating to the Great French Revolution. By LORY MARSH, M.D. London: Ward, Lock, and Tyler, Paternoster-row. 1870.—Those who desire to refresh their memories as to some of the events in the reigns of Louis XV. and XVI., and as to the characters that were then brought to the surface—the shams that made a good deal of noise in their day,—may read this little book with interest. It contains a good deal of anecdote about Talleyrand, Cagliostro, Mesmer, and others, with the wonderful story of the Diamond Necklace, and it is written in a light, easy strain.

Elementary Treatise on Natural Philosophy. By A. PRIVAT DESCHANEL. Translated and edited, with extensive Additions, by T. D. EVERETT, M.A., D.C.L., F.R.S.E. Part I. Mechanics, Hydrostatics, and Pneumatics. London: Blackie and Son. 1870.—The "Traité Elémentaire de Physique" of Professor Deschanel was published in 1868, and obtained a high reputation in France. It was adopted by the Minister of Instruction as the text-book for Government schools; and Professor Everett, having found it so adapted to the requirements of his own class of experimental physics, undertook its translation. The present is the first of the four parts of which the work is to consist; and it certainly strikes us as meriting the character it has attained as a good text-book; for it is clearly and easily written, so as to be capable of being understood, instead of being "over the heads" of readers and youths desirous of acquiring knowledge of this kind. The additions made by the translator have been extensive and judicious.

Introductory Address at Queen's College, Birmingham. By ALEXANDER FLEMING, M.D.—Well worth reading, and contains a just denunciation of the evil of scepticism in men who think themselves scientific, especially teachers.

REPORT
OF
The Lancet Sanitary Commission
ON
RELAPSING FEVER IN LIVERPOOL,
AND ON THE
GENERAL SANITARY CONDITION OF THE TOWN.

No. II.

THE SITE AND THE SEWERS.

EPIDEMIC relapsing and scarlet fevers are but the most recent evidences of an unhealthy constitution which has existed in Liverpool ever since it grew into importance as a commercial port. The very first mortality returns proved that there was something radically wrong in the sanitary condition of the town, and, to the credit of the corporation, steps were immediately taken to obtain a Sanitary Act. The powers therein conferred have since been extended from time to time; and under them the corporation has appointed one of the most complete and competent sanitary staffs in Europe, and has expended some millions sterling in the general improvement of the town. Nevertheless, it must be admitted that the results have not been equal to the expectations which might have been reasonably formed. Throughout the whole period the inhabitants have only been exceptionally free from fatal epidemics. Typhus, and to a

less extent typhoid fever, are never absent. Infantile mortality is always in excess. In 1847, the town was overwhelmed by the Irish exodus: 300,000 starving and fever-stricken people landed in Liverpool in six months; 80,000 of whom located themselves in dog-kennels and cellars, and remained to glut the labour market and propagate a wretched mode of life. In this unhappy year, 60,000 persons were attacked with fever, and 40,000 with dysentery. One-fourteenth of the entire population in the parish died. In some of the very streets in which relapsing fever now prevails, one-third of the inhabitants perished in the year. Ten medical men died, and hundreds of the middle class. In 1848, three epidemics raged at the same time—viz., typhus fever, scarlet fever, and influenza. In 1849, 5245 persons died of cholera, and 1059 from diarrhœa. In 1850, '51, and '52 there was a slight lull. But in 1853 the mortality became excessive; and in 1854 cholera again prevailed. In 1858 there was an epidemic of scarlet fever. In 1860 the mortality was lower than it had been before or since; but in 1861 typhus fever again began, and the deaths from it rose in four years from 390 to 1774 in the year. In 1863 scarlatina prevailed side by side with typhus. In 1864, 2000 persons were attacked with typhus in fourteen weeks, of whom 320 died. In 1865 zymotic diseases caused 5526 deaths; and in 1866, when cholera was added to the list, 7720 persons succumbed to them. In 1867 and 1868, sanitary improvements seemed to be producing some effect; but in 1869 scarlatina began to be epidemic in the middle of the year, and has continued to be so ever since.

To complete the proof as to the fundamental unhealthiness of Liverpool, it is desirable to contrast it with a similar population in some other place. We propose to make this comparison with the worst districts of London, in which the same occupations prevail. And in doing this it will be safest to except the suburbs, and confine our attention to the parish, thus excluding the better classes, and the more sparsely populated districts. Bethnal-green, Whitechapel, St. George's-in-the-East, and Stepney, comprise a district which includes the docks, and employs an extraordinary amount of irregular or casual labour. It will be seen from the following table that, in numbers, area, and industrial resources, Liverpool has the decided advantage.

	Liverpool.	East London.
Area in acres	2220	... 1985
Population in 1861 ...	269,742	288,751
Persons to the acre	121	... 145
Industrial Statistics.		
Domestic	40·8	... 33·7
Commercial	19·1	... 13·7
Agricultural	0·9	... 0·5
Industrial	30·0	... 44·3

Comparative Mortality of Liverpool and the East of London during the three quarters ending Oct. 1st, 1870.

	Liverpool.	East London.
Average of three years, 1867–69	6628	... 5907
Registered deaths, 1870	6433	... 5839
Deaths under one year	1592	... 1539
Deaths from small-pox	1	... 62
,, measles	88	... 92
,, scarlet fever ...	302	... 182
,, diphtheria	26	... 12
,, whooping-cough ...	116	... 167
,, fever	285	... 121
,, diarrhœa	567	... 404
Total deaths from seven zymotics	1385	... 1040

This table proves that the mortality in Liverpool is considerably higher than that of East London. With a greater population by 19,000 in London, there are nearly 600 fewer deaths. The infantile mortality in Liverpool is also greater; whilst the most remarkable feature in the table is, that the deaths from fever are more than double those in the larger London district. In Liverpool one person died of fever to 946 inhabitants, in London only one in 2386. If we multiply the number of deaths by ten, on the reasonable supposition that there are at least ten persons attacked for each death, we arrive at the startling result that every hundredth person in Liverpool has had a serious fever during the present year, without reckoning the epidemic of relapsing fever, which is not by any means so fatal.

What a melancholy history! How severely must the resources of the healthy have been taxed for the relief of the sick, the burial of the dead, the support of the widows and orphans, and the sustenance of thousands who recovered from their illness only to become a permanent burden on the rates. Surely it is desirable that, after more than twenty years of almost useless action, the matter should be probed to the very bottom in order to see whether the principles upon which the sanitary authorities have acted are sound, and whether any untried and yet hopeful remedies remain.

The Site.—It would be impossible to select a finer or a healthier site for the location of half a million people than that of Liverpool. The town occupies the slopes of a series of small hills on the eastern side of the Mersey. The substratum consists chiefly of new red sandstone, which is sound, wholesome, and easily drained. Both on the north and south the sandstone is partially covered with an alluvium consisting chiefly of clay. This superb site the jerry builders, contractors, and the corporation have done, and are still doing, their very best to spoil. Whole tracts of land from which the surface-clay has been removed for making bricks have been filled in with millions of tons of chemical refuse, composed largely of sulphide of calcium. The houses are built upon it, and the sewers pass through it. The sulphide is slowly dissolved out by rain, and the solution gives off a stench of sulphuretted hydrogen when it enters into the sewers or escapes upon the surface. As in Manchester, so also in Liverpool, hundreds of houses have been erected upon midden refuse, and at the present moment there are houses building in Tunnel-lane upon one end of a brick-field, whilst at the other the corporation are filling in the brick-pits with refuse consisting of ashes, fish-bones, lobster-shells, cabbage-leaves, potato-parings, old door-mats, broken pottery, and the thousand other perishable articles which the sewers will not remove. In Grove Park there is another brick-pit partially filled in. At the bottom of it is a quantity of filthy yellow liquid, covered with iridescent putrescence; and on digging into the mass deposited, a fetid steam reeked up, which must be a source of sickness for scores of years to come, should any speculating builder erect a house thereon. The most remarkable feature in the case is that this mode of dealing with the ashpit refuse is justified by the medical officer of health. Dr. Trench is reported to have visited this very spot, and to have perceived no smell. But it is a significant fact that a load of vegetable refuse was picked from the very surface, and that the corporation officers stated that they did not dare to move the whole lest the stench should be too great. No houses can be healthy that are built on such a subsoil, and no sewers can be kept free from noxious gases under such untoward circumstances. The practice shows how easily the judgment of sanitary authorities may be warped by the question of expense. But better a thousand times that the corporation should erect furnaces and burn such refuse, or carry it out to sea, than that they should thus employ it in fouling their own nest for generations yet to come.

Next to the subsoil it is necessary to notice briefly the surface and the general aspect of the town. A million of money has been spent upon the paving and improvement of the streets, and they are now spoiled for want of proper scavenging. The paving, although admirably suited to the heavy traffic of the town, is nevertheless constructed so as to collect manure between the stones; and, not being sufficiently swept, this manure is washed out upon the occurrence of a shower, producing a most unwholesome smell. The thoroughfares are swept at night, but there are no

regulations concerning the deposit of house-sweepings. Corks, papers, broken bottles, &c., were seen to be swept out of a restaurant at 9 A.M. in one of the principal thoroughfares, and they were not removed till nightfall. Nor is this untidiness and general dirtiness peculiar to the public streets. The entrances to many of the shops and merchants' offices look as if they had never been washed since they were built. Splendid encaustic pavements may be seen, of which the colours are scarcely visible; and in a long round of streets, visited in the early morning, there was only one housemaid found washing down the doorsteps. It might almost be supposed that there is a general dearth of paint, so great is the accumulation of grease upon many of the doorways; in fact, the rich cannot reproach the poor with filthiness so long as they set them so bad an example. There is wanted a healthier state of public opinion on this point, and then there will be a chance of the most cleanly labourers being the most regularly employed.

The Sewers. — There are in Liverpool 221 miles of streets and 90 miles of passages. In 1847 the length of the sewers was under 50 miles, and they were exceedingly defective in construction. Most of these have been replaced, and there are now 200 miles in the streets and 90 in the passages and courts. It affords high testimony to the capacity and foresight of the engineer that he has introduced the intercepting principle, and from the very first has contemplated the ultimate utilisation of the sewage on the land. The gradients are excellent, and, although the flushing arrangements for the main sewers are not in strict accordance with those now generally employed, there was certainly no deposit whatever at the points examined; and it is calculated that no part of the sewage occupies more than an hour in passing from the farthest inlet to the outlets in the Mersey. It was stated on high authority that many of the sewers were constructed in porous sandstone rock, which, becoming impregnated with foul matters, gave off an unusual amount of noxious gas. Examination has proved that there is no substantial foundation for this complaint. Less than three miles of sewers have been so constructed, and these only in places where the sandstone is hard and sound. The sewers so made were found perfectly free from deposit, and as devoid of smell as those which are lined with brick. The marks of the pick remained as fresh as ever on the surface, and immediately below the stone exhibited the fresh red colour of the native rock.

As to the mode of ventilation, there are greater difficulties to be encountered, and there are greater objections to be raised. A very casual inspection proves that the Liverpool sewers are ventilated on principles altogether differing from those pursued in London, Croydon, Bedford, Carlisle, and other important towns. According to the Liverpool system the object is "the removal, in *covered* conduits, from the houses and streets of all refuse capable of suspension and solution in water, as fast as it is produced, in such a manner as shall prevent the generation of noxious gases." On the other hand, it is affirmed that the formation of noxious gases must be regarded as practically unavoidable, and that provision must be made for their dilution and diffusion *as soon as they are formed*. According to the first, "the branches and mains should be provided with apparatus to prevent the escape of noxious effluvia, should they by any chance be generated." By the other, the mains and branches must be *as open as possible*, that the effluvia may be diluted and escape. In accordance with the principle laid down, ventilation in Liverpool has always been regarded as a precautionary measure, and not as a principle to be universally carried out. All the man-holes in the middle of the streets are made impervious—all the gullies and service drains are trapped. Connexion was made with the rain-water spouts only when it was found absolutely necessary to provide an escape for noxious gases. It was only after many years that artificial means for extracting those gases were regularly introduced, and the plea for their introduction was that there was an insufficient water-supply.

If, however, it be admitted for the moment that there are now sufficient outlets for noxious emanations, it must be noted that there is no provision whatever for the admission of fresh air. The outlets to the river are all closed, and the only way air can get into the sewers is by the rain-spouts and ventilators, and by the imperfections of the service-drains, which in that case are just as likely to be outlets of poisonous gases as inlets of fresh air. We appeal to common experience on this important point. If we have an offensive smell in any of our rooms, it is not sufficient that we open the window to let it out; but we must open the door also to let in fresh air, and make a thorough draught: and so with sewers also. If it be admitted that poisonous emanations do and must arise, is it not reasonable at once to provide the sewers with open doors and windows, so that the gases may be diluted and escape? But it is necessary likewise to note, that the generation of deleterious effluvia is a necessary condition of all sewers, no matter how perfect their construction, or how abundant the water-supply may be. They are generated by the gelatinous, muddy material which forms on the surface of the brickwork, on the parts which are alternately covered and uncovered by the rise and fall of the sewage, in the fluctuations of the day in the mains, and of the hour in the branches. This gelatinous formation no flushing will completely remove. Furthermore, it must be recognised as a sound sanitary principle, that the greater the stink of sewer gases the less generally is their danger. A sound stink gives timely warning of an evil; but the apparently inoffensive vapour carries to its unsuspecting recipient the germs of disease, or exerts its still more subtle yet depressing influence on the vital powers.

In Liverpool there is no proper ventilation of the sewers, because there are no proper inlets of air. The outlets are of three kinds: 1. Communication with furnaces. 2. Through untrapped water-spouts. 3. Through Archimedean screw ventilators. The first plan was found in London to have a very limited effect. The area of the branch drains is comparatively so large, and the openings, spite of every precaution, so numerous, that the effect was found to be reduced to nothing at a very short distance from the furnaces. Nor is the plan altogether devoid of danger. An explosion took place in London, the sewers having become charged with coal gas; and although the plan may be usefully employed for the ventilation of a tunnel-sewer without branches, it must be pronounced impracticable in ordinary cases. The ventilation through rain-spouts is useful as far as it goes, when there is no rain to fill them. But it is obvious that they are least effective in wet warm weather, when the generation of noxious gases is most rapid, and the obstruction in the rain-spouts greatest. It is also through them that the sewers become rapidly filled up by every hasty shower; and as in this case the air displaced from the sewer has no other outlet, it is forced through the traps into the houses. This was proved to have been the case at Croydon, where, in consequence of the evils of closed sewers ventilated in this way, the arrangements have been changed. Nor is the plan reliable. Ten per cent. of those examined in 1865 were found broken or inactive, whilst it is admitted that there is a downward draught in many of them in the lower portions of the town. Upwards of a thousand Archimedean screw ventilators have been erected within the last few years, chiefly on the drains of courts. No doubt they exert a very beneficial effect. The average velocity of air upwards, when they are in full action, appeared to be about two miles an hour—not, by the way, a very rapid draught; but in some cases it was much less, and in one there was a positive down draught. But the chief objections are, that, after all, their area is small as compared with that of the sewers they are used to purify; that their action is extremely local, and even that is interfered with by accidental surface openings near, by accumulated rust at the bottom of the iron shafts, by stoppage in the drain with which the ventilation communicates, and specially by a basket of charcoal, which is apparently placed at the bottom for no other purpose.

What, then, is the test of wholesome ventilation, and how will the sewers of Liverpool bear that test? If the principles laid down are admitted as correct, the wholesomeness of a sewer will be tested less by the amount of smell than by the amount of movement in the air. Stagnation is dangerous, perfect aëration safe. And seeing that hot water and a certain amount of chemical and other gross impurities, liable to rapid decomposition, are certainly admitted to the sewers of Liverpool, the amount of movement or aëration ought to be very great. What, then, was the result of trial? In one of the largest sewers, which was devoid of smell, the air moved at the rate of two miles an hour, a force just sufficient to deflect the flame of a

candle in the direction of the current. But in another sewer, where there was a strong smell of coal-gas, there was scarcely any movement of the air at all; whilst in two places near the docks, the emanations of heated vapour precluded the possibility of examination. Near this place a few of the ventilators were emitting vapour; the quantity, however, was trifling, as compared with that which was penned up below. The practice of turning waste steam into the sewers ought at once to be stopped. It promotes decomposition, destroys the brickwork, and drives the gases into the houses near. It is monstrous that the men should have been unable to raise the covering of a man-hole in Blacklock-street, because it had been so much heated by steam discharged into the sewer immediately underneath.

In the absence of aëration or ventilation, properly so called, Liverpool depends for its salubrity on the perfection of its house or service drains. In doing so it depends upon a broken reed. No system of service drains can be permanently maintained in a condition in which they are impervious to sewer gas. In the first place, contractors and jerry builders rarely make the joints tight, or lay the drains in proper levels. It is all but impossible to make them do the work properly; and even when they have been made properly, drains are like walls—they sink, or the ground sinks with them, and the brickwork cracks. In the case of drains the danger is out of sight; but not less surely does the noxious gas wind its way into the very basement of the building, and pervade the house. The house-drain trap also is a machine altogether beyond the comprehension of scullery maids, and of the wives of the labouring classes. In 1865 Mr. Evans described to the corporation that which still takes place. He found in kitchens of all sorts the bell-traps frequently taken off, and often lost altogether. This occurred in eight houses in one street. In the cellars and areas the D-traps had been broken with the poker, or taken out entirely and thrown away, or sold for old iron, leaving open communication with the drain. In five streets the number of defective service drains varied from 14 to 37 per cent. He said that the same defects occur in the very best houses of Liverpool, where bell-traps are fixed. The inspector of nuisances said the staff could not meet the difficulty, for the traps were often damaged repeatedly within three months. The only remedy therefore is the thorough ventilation of the sewers outside the houses, so that it may become a matter of comparative indifference whether the traps are tight or not. It is a thousand times better that the noxious gases shall be diluted in the sewers, and discharged in the middle of the street, than that they should be projected in a concentrated form into the kitchens of the rich and the dwellings of the poor.

The sewers of London are at least as foul as those of Liverpool, and the formation of gases is as great. The main difference is that in London they are discharged in the centre of the roadway, and no one lives over them to contract disease. Liverpool cannot be healthy until the fundamental conditions are attended to. And the recommendations of this report must be:—

1. That the practice of fouling the foundations by ash-pit refuse should be abandoned and prohibited.
2. That all classes should unite in raising the public standard of cleanliness.
3. That the sewers should be provided with ample inlets of fresh air.

Foreign Gleanings.

RESECTIONS IN RECENT WOUNDS.

WHETHER immediate resection, or treatment by ice and rest, or Lister's method is to be employed in injuries of joints (especially injury from gunshot) is not quite settled. No doubt the surgeon must be guided by the minute circumstances of the case. But we may, in the meanwhile, quote a passage from Dr. Fischer's report during the earlier part of the present war:—"The number of gunshot injuries to joints was very great; we first tried to treat them without operative interference, and succeeded in a pretty large number of cases. We were, however, obliged to resort to resection in 34 cases—viz., 13 of the shoulder, 15 elbow, 3 foot, 1 knee, 1 hip, 1 scapula. The results proved favourable beyond our expectations, as we lost only four patients, each of whom was very ill before the operation."

PERFECT CLOSURE OF WOUNDS.

Professor Tyndall probably considered his cotton wool advice quite original; but we find that Dr. Rapp, in Rottweil (Germany) has, for the last five years, treated all wounds with cotton wool layers, basing himself upon Pasteur's theory. He moistens the wool with a weak mixture of water and tincture of arnica, and leaves the dressings six or seven days, with the best results. This method is worth a trial, and should be placed in juxtaposition with Lister's.

REMOVAL OF THE THYROID BODY.

In No. 27, 1870, of the *Wiener Med. Woch.* we find a description, by Dr. V. Czerny, of numerous experiments upon dogs (on Billroth's suggestion) to ascertain whether the thyroid body could be wholly removed without a fatal issue. After four dogs had passed through the ordeals of tracheotomy, laryngotomy, partial removal of trachea, &c., a fifth underwent a careful operation, detailed at great length by Dr. Czerny, after which it was left without the thyroid body, the epiglottis being preserved. The poor animal in a little while contrived to swallow food pretty well, and breathed freely. The author concludes that in cases of cancer of the thyroid body, the operation might, with some risks, be undertaken upon the human subject.

HYDRATE OF CHLORAL AND MORPHIA IN TETANUS.

Dr. Gronemann has published the case of a man of forty-four, who suffered from tetanus in consequence of a shot in the chest. Chloral alone did not relieve the spasms, but when morphia was given with it, the improvement was manifest. The prescription was as follows: Hydrate of chloral, 150 grains; hydrochlorate of morphia, 3 grains; distilled water and simple syrup, of each two ounces: the fourth part night and morning. The man recovered.

TANNIN *versus* ALUM.

Dr. Max Jaffé, of Hamburg, contends (*Med. Press of Vienna*, No. 39, 1870) that alum, so frequently used for gargles, is hurtful to the teeth, and holds that tannin, dissolved in water or red wine, is far preferable.

ROTHELN, OR GERMAN MEASLES.

To the Editor of THE LANCET.

SIR,—Dr. Murchison's lucid exposition of this disease cannot fail to be read with especial interest by many, as this complaint is by no means very generally recognised as a distinct disease by the profession. At Brighton, about the years 1856-57, a great many cases were observed, so that it became the subject of a paper read before the Brighton and Sussex Medical Society; and there being a large number of first-class schools in the town, it became a matter of no little consequence that the disease should be early recognised, and distinguished from scarlatina, in order, as Dr. Murchison says, that "the medical attendant might not get into trouble from his inability to determine its real nature."

During occasional visits to London at this period also, I was much struck by finding this disease unknown to those medical friends with whom I conversed, and especially so when, speaking on this matter to a practitioner, who for upwards of forty years had enjoyed a most extensive practice, he assured me he had never met with these cases. My particular object, however, in writing on this subject, is to state a remarkable fact bearing out the statement of Dr. Murchison, "that rötheln does not protect from either measles or scarlatina." I was attending a young lady at a large school with this complaint, rubeola notha, and it became a matter of importance to state at once, if possible, whether this was scarlatina or not. It was decided not to be scarlatina; but this opinion did not altogether satisfy the lady of the house. The case went on until about the tenth day, when, just as the patient was becoming convalescent, she was seized with a genuine attack of scarlatina, which ran its full course.

So decided a proof of the diversity of the two diseases is, I think, worth recording; and, if my memory serves me rightly, this is not the only case I have met with of the one disease running into the other.—I am, Sir, yours &c.,

Denmark-hill, Nov. 3rd, 1870. HORATIO COAKE BRENCHLEY.

THE LANCET.

LONDON: SATURDAY, NOVEMBER 19, 1870.

THE introduction of what is called the "germ theory" into popular speculations about spreading diseases will furnish a curious subject for some future historian of floating phases of thought. Dr. RICHARDSON has done good service by calling upon us to look this theory, or, rather, this hypothesis, fully in the face, and to compare it with our actual knowledge about the facts to which it is sought to be applied. We do not know that the hypothesis had ever before been definitely formulated, and we suspect that many of those who have talked about germs have had no very precise idea of what they meant by them. The conception of germs as causes of disease seems first to have been popularised by Dr. WM. BUDD'S famous letter to *The Times*, more than twenty years ago, on the subject of "Cholera Fungi"; and by the obvious suggestion that, if these fungi were realities, their germs or spores might be the means of propagating infection. Over the cholera fungi the battle raged merrily for a time; and it left behind a very general impression that the bodies seen were little else than the minute particles which the patients had swallowed in the form of chalk mixture. The subsequent progress of knowledge, the use of better microscopes, and the general improvement of methods of research, have taught us that fungi do exist in the evacuations; although their relation to cholera is a problem still utterly undetermined. But the controversy, both in its earlier and later stages, served to render people familiar with the idea of germs as agents in the causation of cholera; and, by a not uncommon figure of speech, the phrase "germs of disease" came to be applied to the unknown agents in the causation of other maladies also. When thus used, germ did not signify the sporule of a fungus, or the ovum of an animalcule, but the *x*, whatever it might be, to which a certain ultimate result was to be ascribed, the origin, or first principle, of the malady. Its use was even less definite than when we say the germ of an idea; for that is something which we can realise; whereas we know the hypothetical germs of disease only by their presumed effects. The use of a single word in a variety of senses has produced, as it never fails to produce, inextricable confusion of thought and language. One who wrote or spoke of the germs of scarlet fever, for example, would leave it doubtful whether he intended to maintain that the poison of the disease is propagated by *quasi* ovules, or whether he referred only to some unknown carriers or agents of contagion. Of late, moreover, the discussions about the origin of the lower forms of life have more embroiled the fray; and it has become manifest to most thinking people that a belief in germs, by which we mean ovular germs, as the causes of spreading diseases, involves the absolutely unreserved acceptance of the doctrine of spontaneous generation. The evidence that such diseases may originate in places to which they cannot have been brought seems to be complete and irrefragable. The results of Professor LISTER'S practice will by no means bear the interpretation that many persons have put upon them. They are highly valuable as a contribution towards the ultimate decision of the question; but they settle nothing. Even if they could be reproduced with certainty by others, they still would not prove the excluded or destroyed septic elements to be germs; and at present their weak point is that so many careful surgeons fail to reproduce them — thus pointing to the high probability that the antiseptic treatment does no more than combine a number of conditions that are favourable to the healing process, and thus procure a high ratio of excellent results. While, therefore, we fully coincide with the observations made by Dr. BURDON-SANDERSON, at the recent meeting of the Medical Society, to the effect that the problems relating to the intimate nature of contagion are not to be settled either by dialectics or by ingenious guessing, but only by careful observation and experiment, and that the materials for fruitful discussion have still to be gathered and stored up, we must in the meanwhile urge upon the scientific advocates of the germ theory that they should discard the use of words of doubtful meaning, and should formulate precisely the propositions which they think likely hereafter to be proved. Up to this time the germ theory has oscillated between scientific thinkers on the one hand and tea-tables and popular lecturers on the other, and it is hard to know how it may be grasped or defined. Some of its adherents have found a ready way of meeting difficulties by attenuating the demands of their hypothesis; and the last and most notable step in this direction was probably Professor TYNDALL'S suggestion that perhaps all the particles in the atmosphere, germs and all, might be packed into a cigar-case. It is almost *lese majesté* to hint that a learned Professor may also be a joker of jokes; but the weakness of the flesh seems to see in such a hint the solution of difficulties that would otherwise be perplexing. For ourselves, we are disposed to turn away from questions about germs and generation with a feeling akin to despair, and to wait in patience and silence for the fruition of the under-current of research that is flowing on, undisturbed by the hubbub of debates without data and of conclusions without basis. There are two or three classes of familiar clinical facts which might, we think, be found to have some bearing on the questions under dispute, and which would be worthy the attention of investigators. The first of these would be the putrefaction of pus in unopened abscesses in certain situations—e. g., near the alimentary canal; the second would be the occasional presence of bacteria in the blood and of vibriones in the urine; and the third would be the frequently poisonous action of the exhalations of persons suffering from spreading diseases upon others who are not susceptible of the specific contagion. We have known instances of people who have passed through scarlet fever, and were no longer liable to it, but who were distinctly poisoned by scarlet-fever patients, so that they suffered from headache, lassitude, pains in the limbs, and even ulcerated sore-throat, within a few hours of

exposure. The occasional correlation of scarlet and puerperal or surgical fever is probably another example of a similar mode of action.

THE letter of Mr. CHARLES HAWKINS on the subject of Medical Legislation, published in our last issue, appears at a very opportune time. It is the time when those who think they perceive the explanation of the past failures in medical legislation, or have any true idea of what is wanted for more satisfactory and successful legislation, should speak out, especially if they can speak out in brief suggestive terms like those of Mr. HAWKINS. We commend Mr. HAWKINS's letter to the consideration of all who are interested in this subject. He has been long in the profession; he is a Fellow of the Royal College of Surgeons; he is the biographer of Sir BENJAMIN BRODIE, who was the first President of the General Medical Council. He cannot therefore be supposed to be in favour of changes greater than are called for by the nature of the case. Yet if his suggestions are justified by the nature of the case, it only shows how entirely inadequate were all the proposals of last session. Mr. HAWKINS thinks the unsuccess of the Government last year was due to hurry, and to a disregard of, or want of acquaintance with, the feelings and opinions of the profession and the public. There was another error: the excessive regard shown for the medical corporations and other bodies, who were too much interested to be good advisers. But we must forget all these failures, and make them contribute to future success.

Mr. HAWKINS thinks, and thinks justly, that the profession is pretty well agreed on three points, and that these three points must be dealt with in any Bill that is to succeed. First, a general and uniform examination to be passed by all before entering on the practice of their profession; secondly, a Board of Examiners appointed for no other reason than that they are well fitted to examine; thirdly, a Central Board, like the present General Medical Council, only smaller by half, and elected by the Government and by the registered practitioners of England, Ireland, and Scotland respectively. Mr. HAWKINS regards the acceptance of direct representation of the profession as simply inevitable, whatever may be individual opinions on the subject. There was such an extensive and unanimous demand for this that it must be conceded. We hope that the Government by this time have arrived at a similar opinion. Mr. HAWKINS naturally infers, from the exhibition of interest in the elementary education of the country by many most able men, that there would be no difficulty in finding good candidates for the Council, and that the best candidates would be likely to be chosen. It is a poor compliment to pay our profession to regard it as incapable of electing its best men to sit in counsel, or to consider that its best men would not be willing to be so elected. If men of the highest scientific position can be found to take an interest in the means by which neglected children are to be taught to read, write, and cipher, *à fortiori* they will be ready to be members of a board to regulate education in Medicine. It is almost superfluous to remark with how much more effect and influence such gentlemen would act who represented the profession at large than those who only represent its corporations. The corporations and medical authorities will no doubt be surprised to find themselves unrepresented in the Council proposed by Mr. HAWKINS. Whether this principle be ultimately adopted in its absoluteness or not, it is clear that it is now coming to be well understood everywhere that the corporations exist for the profession, and not the profession for the corporations; and the sooner the corporations realise this the better for themselves.

We have before us an address by Dr. YOUNG, of Glasgow, on the same subject, constituting the opening discourse in the Faculty of Medicine in the University. In this address Dr. YOUNG says the Act of 1858 was a compromise, and that of 1870 was "worse—a retrograde step in so far as the State desired to put itself in competition with existing licensing bodies." Dr. YOUNG proposes to institute a State examination; to buy up the licensing power of the corporations; to abolish the licensing power of universities, and restrict them to their normal function of teaching. The State examination, he thinks, should be open only to those who have obtained a certificate or degree from some recognised teaching body. The examination of the State Board he would restrict to practical subjects. And in his opinion the cost of State examination should not fall on the candidate, but on the public, in whose interest the examination is held. These are only the more practical proposals of Dr. YOUNG's disquisition, and some of these do not seem to be over-practical or self-consistent. It is evident, however, in every part of the land that something must be done in the way of medical reform. The sooner it is done, the more likely is it to be moderate and to retain all that is good in the present state of things.

NOTWITHSTANDING the encomiums that have been passed by some very high personages abroad on the labourers and their work of charity among the hospitals and the sick and wounded of the two armies, we confess that we entertain considerable misgivings as to whether the principle underlying societies of this kind is quite so sound as it appears; and further, if this be conceded, whether the organisation and working of the committee of our National Society has been anything like so successful as it might have been. It is well known that the poor in this country view the departure of materials for aid to the wounded with considerable animosity, and the statesmen of either side have not been overwhelmed by any sense of gratitude to us. The *Spectator* contains a letter from Dr. HUMPHRY SANDWITH, C.B., in which he corroborates the opinion we expressed, that chloroform was invariably used by the German surgeons during operations, exactly in the same way as it is by ourselves, and that Dr. RUSSELL was probably labouring under some misconception as to the facts in the description he gave of what he saw and heard during one of his visits to the hospital at Versailles. Dr. SANDWITH goes on to say, however, that many hospitals were often in want of many things, though not for any length of time; and adds: "It may be said that if it were not for such societies the patients would suffer under the cruel penury of the Prussian Government. For my own part, I do not think so, as in the appointments and comforts of the

healthy troops I saw no evidence of excessive penury; and greater efforts and expenditure would have been made had not these societies relieved the Government of such extra exertions." Now this seems to us to touch on one of those abuses to which a system of voluntary relief to the wounded may give rise. If the Germans would have made greater efforts but for those which the Government expected from these societies, it seems pretty clear that money which ought to and would have gone for this object was applied to other purposes—and possibly, for all we know, to the purchase of munitions of war.

The writer of the article "On the Ambulance and the War" in *Macmillan's Magazine*, on which we commented last week, refers to the constitution of the Executive Committee of the Society as follows:—"What would," he asks, "be said of a Committee for the defence of London with only one military man upon it, and he seldom present at its deliberations? It seems to me that the members of the medical profession are either remiss in coming forward on such occasions, or else they are snubbed; while lords, like the revolutionary leaders of Paris, are ready to command a fleet or an army, or perform a surgical operation at a moment's warning." This certainly seems to us a just criticism; for here we have a gigantic Society for aid to the *sick and wounded*, upon the Committee of which is only one military surgeon. We know nothing of Dr. SANDWITH beyond the facts with which, we presume, the Committee is as well acquainted as we are—viz., that he was an inspector of hospitals at Kars in 1855, and that the task of organising the hospitals fell to his lot. Surely it might have been well to have pressed a man with these antecedents to serve on the Executive Committee. We do not doubt that much good has been done in relieving the urgent necessities of the sick and wounded; but we much question whether anything like the amount of good has been done that might have been effected had the organisation and arrangements, and the administration of the funds, been more skilfully and carefully carried out. What was wanted above all things was the presence of medical men with administrative capacity. Yet, if we remember aright, a naval deputy inspector of hospitals left the seat of war disgusted with having nothing to do; and at the present time Captain FURLEY and Captain HENRY BRACKENBURY are the peripatetic "main head centres" of the Society under whom, it is presumed, all the doctors are acting. Now, what would the latter officer think if a doctor were put in command of his battery of artillery? Again, it seems tantamount to a confession of incompetence for the Society to have subsidised Paris, the richest city in the world after London, with £20,000, instead of supplementing the wants of the wounded in remote field hospitals and out-of-the-way places.

THE last parts of the *Journal de Médecine* contain a translation by Dr. OSCAR MAX-VAN MONS of the Memoir of M. SCARENZIO, of Pavia, and M. RICORDI, of Milan, to which the gold medal was adjudged at the Medical and Natural Science Congress held in Brussels in 1868. In this Memoir a hundred and four cases of various forms of syphilitic disease, occurring in both sexes, at all ages, and pursuing diverse occupations, are recorded, in which the treatment by the hypodermic injection of calomel was adopted with marked success. Thus, out of eighty-five cases of primary disease there were seventy-nine complete recoveries, three partial, and three deaths, of which two had no relation to the plan of treatment pursued. In opposition to M. LEWIN, MM. SCARENZIO and RICORDI employ calomel suspended in gum or glycerine and water, instead of corrosive sublimate. The quantity injected varied from about three to fourteen grains. Slight salivation occurred in two instances only. The suspended calomel was injected by means of a PRAVAZ'S syringe in the ordinary method; and, although any part of the body may be selected, they prefer the outer part of the leg or forearm, or the side of the chest. The operation produces but little pain. A minute fluctuating tumour is left, from which in a few hours the watery parts are absorbed. Eight or ten days afterwards a local reaction occurs, terminating—and this is the chief objection that can be urged against this mode of treatment—in an abscess, which usually contains from a drachm and a half to two drachms of matter. It is advisable to delay the opening of the abscess in order to allow absorption to take place as completely as possible. Erysipelas of the arm occasionally occurred, and this they consider may best be obviated by the application of a thick layer of collodion to the limb, slightly bent, immediately after the injection, so as to act as a compressive bandage. The formation of the abscess took place in every case of injection except two. It is curious that the pus discharged generally contains no trace of mercury; it would seem that the calomel must be converted into sublimate and undergo absorption. As regards the frequency with which the hypodermic injection of calomel may be repeated, they state that in children two small injections are usually sufficient; in adults five or six grains may also be injected twice. They consider this method of treatment to be more certain and definite than the usual mode of administering mercury, and that it is especially well adapted for infants, pregnant women, and those who for various reasons are unable to take it by the mouth or to use it as an ointment. It seems to present, at any rate, many advantages over corrosive sublimate, which is much too violent in its action even in small doses. Still, the constant or almost constant production of an abscess will, we think, militate against its general introduction into English surgery.

WE had last week to comment unwillingly upon the conduct of the medical students at Edinburgh, and we are now glad to be able to discharge the more congenial duty of bearing testimony in their favour. It is well known that a controversy has lately raged with regard to the admission of female students to the medical classes; and the arguments adduced *pro* and *con* have always been of a somewhat abstract character, taking little heed of the claims or wishes of those who at present form these classes, and for whose benefit they were instituted. The students, however, or perhaps we ought rather to say the male students, objected to being thus ignored; and at the last meeting of the managers of the Infirmary they presented a memorial, to which 504 signatures were attached. In this memorial

they object to the admission of ladies to the Infirmary on several grounds, but especially because, if they are admitted, one of two things must necessarily happen: either many subjects of the gravest medical importance will be imperfectly treated or omitted altogether, or, in the event of such subjects being entered into in detail, they would feel compelled to abstain from being present at their discussion before a mixed audience. The memorialists further urge that when they entered upon their hospital studies they had no means of foreseeing that there was any probability of their having to be pursued under circumstances so distasteful to them; and that, had such circumstances been foreseen, they would have materially influenced them in their choice of a school of medicine. For these and other reasons they respectfully submit that it would be prejudicial to the best interests both of the institution and of the students to throw open the wards of the hospital for the simultaneous instruction of male and female pupils. The managers received and discussed the memorial, and determined to postpone their final decision upon the question.

We recognise in this memorial not only true wisdom, but also that best form of manliness that insists upon respecting women in spite of themselves. As long as our male students act in this spirit, the epicene agitators in petticoats who clamour for mixed classes will hardly carry the day. We have no voice to raise against medical women, if such there must be; and, although we think the profession a pursuit for which, as a rule, they are utterly unsuited, and which would certainly falsify their expectations and disappoint their hopes, we would lift no hand to hinder them from entering it by proper channels. There are many who believe, and with much reason, that the modern plan of educating the sexes separately is mischievous and foolish, and that it ought to be abandoned. But even they would hardly propose that it should be continued until beyond the age of puberty, and then abandoned for the first time at the tables of the dissecting-room and in the wards of the hospital. Such a change would, in fact, be an abandonment of decency; and we feel assured that it could be productive of nothing but mischief. We all know the consequences that follow from crowded dwellings—from the herding together of individuals of both sexes in houses too small to allow of either having any privacy from the other; and just as the barriers of modesty are too often utterly broken down by this means in the lower classes, so would they also be in a higher class, if young women and young men were allowed to crowd promiscuously round the beds of nude patients, or to attend together upon clinical and other lectures in which the sexual organs, relations, and diseases must be often and necessarily discussed. We therefore cordially thank the Edinburgh students for their bold and timely protest. We earn that the total number of medical students there is about 550, so that the signatures amount to nearly 92 per cent. of the whole.

IT appears, from the list which we publish on page 728, that, with all the inducement now offered by the naval service, no English or Scotch students can be tempted to enter it; and that from the Irish schools only six eligible candidates presented themselves. We presume therefore that there are still nineteen vacancies, and that these will probably be increased by promotions or resignations by February next, when the Director-General will be obliged to go into the market again, not, as on the present and last occasions, without competition, but with the Army Medical Department, and possibly the Indian service, also asking for candidates at the same time. What prospect of success then is he likely to have?

We believe that want of trust in the good faith of that constantly shifting board, the Lords Commissioners of the Admiralty, has much to do with the present dearth of candidates. With each political change a fresh body of innovators comes into power at Whitehall; and there is no certainty that the next board may not withdraw the few advantages offered to the service by the present one. Then, who can tell but what the Treasury, or an economic Chancellor of the Exchequer, may interfere next year, and cut down the present and prospective emoluments of the service; or possibly some Treasury minute may be dragged to light, such as that by which the good-service pensions of the inspectors were reduced the other day. One standing grievance of the service is that staff-surgeons are, as regards retirement, put in a position inferior to that of chaplains, naval instructors, secretaries, and paymasters, by £50 a year. The number of appointments in the inspectorial list are so few that everything should be done to make up the want to those meritorious officers who have served their country for twenty or thirty years in all parts of the globe; and whatever may be the jealousies of the other branches of the service, the Admiralty ought not to hesitate to put the staff-surgeons in their proper position.

Medical Annotations.

"Ne quid nimis."

THE DIFFUSION OF SCARLET FEVER BY THE LAUNDRESS.

WE have been favoured with a communication from Dr. Heslop, Physician to the Queen's and Children's Hospitals, Birmingham, which appears to us to possess a considerable amount of interest at the present time, inasmuch as it suggests lessons of a very practical character. We must refer our readers to Dr. Heslop's paper, which we purpose to publish *in extenso* next week, for a more detailed account of the conditions affecting the origin and spread of scarlet fever in the Children's Hospital at Birmingham. Meanwhile we may, as concisely as practicable, epitomise the more prominent points. It appears, then, that at the beginning of the present year the in-patient department of the hospital was removed to a new and more suitable locality. This division contains wards for contagious and non-contagious maladies, precautions being taken for the isolation of the patients in the former. While the diffusion of scarlatina had been exceedingly rare among the ordinary medical and surgical patients in the old building, it was found to be anything but rare in the newly-inhabited one. Ten cases of scarlatina occurred in the general wards in a little more than two months. This led to very minute inquiry on the part of the medical staff. For the many years during which the old building was occupied the patients' clothes had always been washed outside the establishment by two separate

laundresses—one taking the infected, and the other the ordinary linen. At the new institution all the linen was washed in the hospital laundry; but that from the infectious cases was, first of all, removed to a garden, and steeped in a solution of Condy's fluid before being taken to the laundry. The linen from the two classes of patients was not mingled together; each was washed on separate days, but in the same room and by the same persons; in fact, the clean linen of the ordinary patients was being folded and mangled, and otherwise "got up," at the time that the other was undergoing the process of washing. The medical officers suggested that the plan followed at the older institution should be adopted in the new; and the linen used by contagious cases was sent to a laundress outside the hospital altogether, who took in no other washing. This order took effect on the 28th September. From that date to the present time no case of scarlet fever has occurred in the wards.

Such is a brief recital of the leading facts; but there are, of course, several intermediate links connecting these facts together, as well as others of an instructive kind. These, with several important inferences and suggestions, we must leave for Dr. Heslop's discussion next week, contenting ourselves for the present with inviting our readers' attention to a statement of the facts from an official and reliable source.

PHYSIOLOGY AT CAMBRIDGE.

THE newly-appointed Prelector of Physiology at Trinity College (Dr. Michael Foster) commenced on Monday his course of lectures in a part of the new Museum which has been temporarily fitted up as a Physiological Laboratory. He gave a lucid and able exposition of the three great factors of life—contractility, as evinced chiefly in muscles; irritability, as evinced chiefly in the nervous system; and secretion; dilating upon the much-vexed question how far these are attributable to physical agencies, or are to be referred to another agency called "life." He compared the latter view to a fortress closely besieged by an able band of investigators, who are ever narrowing its area, and pressing the physical forces closer and closer upon it; but it has not yet capitulated. No one has a right to say that it will or will not capitulate, and till it has done so we are perfectly justified in regarding it as an entity—as a something to be taken into account in the investigation and the attempts at the explanation of living processes. He should still, therefore, use the term without committing himself to either view. He gave definitions of physiology and morphology, and spoke of the enormous importance of vivisection to the advance of physiology. By it Vesalius might be said to have laid the foundations of physiology; by it Harvey had been enabled to obtain the proofs of his great discovery. Without it, all that had been written on physiology would have gone for very little, and we should still have been in the Aristotelian mist, darkened by the theories of the schoolmen. He wished, however, to state that, in the teaching of physiology, it would not be necessary for him to resort to it much. He mentioned the plan he intended to pursue in carrying out the intentions of those who had placed him in that honourable position. Lectures he did not regard as a very fructifying mode of sowing seed; he thought it far better that men should work and see for themselves. With the munificent aid of Trinity College he hoped ere long to make the physiological laboratory at Cambridge one of the best working laboratories in the country. He intended to have practical classes in addition to the lectures, and students who were competent would have opportunities for private work. It would be a labour of love to him to render practical aid to those who needed it, and to promote the study of physiology by every means in his power.

A considerable number of the senior members of the University were present, as well as undergraduates, and warmly applauded at the close of the lecture. The lectures are for the present open to all members of the University without fee.

INFECTIOUS DISEASES AT LEICESTER.

DR. BARCLAY, of Leicester, has addressed a letter to a local paper, the *Leicester Chronicle and Mercury*, in which he advocates the erection of a detached building, as an appendage to the infirmary, and to be used as a means of dealing with local outbreaks of infectious disease in the town. He recommends that the building should be so constructed as to contain six or eight rooms on the ground floor, with not more than two beds in each; the rooms to be non-communicating, and to be provided with every means of isolation and disinfection; the patients to be medically attended, fed, and nursed, by the infirmary staff, under such regulations and restrictions as may prevent (humanly speaking) the possibility of the communication of contagion. Dr. Barclay proposes to admit to this building selected cases of small-pox, scarlet fever, measles, and erysipelas, all of which are now inadmissible either to the infirmary or to the fever house. He defines a selected case of small-pox as including every one that could be coaxed or forced to come, gentle or simple. A selected case of scarlet fever would be such as the first case occurring in a house with children, a young person living in a shop establishment with other young people, the head of a family, a very bad case, a servant in a house with children, a case at a hotel. The same principles of selection would apply to measles.

We cannot but think that Dr. Barclay's scheme is of the highest practical value; and we cordially recommend it to the managers, not only of the Leicester Infirmary, but of every other. The letter is rather a lengthy one, and enters into details about treatment and disinfection which we need not reproduce. But we would urge upon Dr. Barclay the propriety of converting it into a small pamphlet for general distribution. His suggestion just solves the practical difficulty of how to have a hospital for infectious disease always ready for an emergency, and yet costing nothing when it is happily unemployed.

THE MEDICAL PROFESSION IN GLASGOW.

DR. D. CAMPBELL BLACK has published an address on certain aspects of medical reform read before the Medico-Chirurgical Society of Glasgow. As he has published this address at the request of the Society, we may consider that the statements and arguments are, to a great extent, endorsed by the profession of that city. We can only notice a few of these. Dr. Black thinks there is too much looking to the Legislature for the reform of defects and abuses in the profession, and he calls loudly upon the profession to reform itself, to look to itself. He specifically challenges certain appointments to public institutions as not made on any ground of equity or respect for professional ability or experience. If all Dr. Black says of the state of the profession in Glasgow be true, medical practice is not conducted upon the most dignified principles, or in a way to command the respect of the public. To this circumstance he attributes the fact, that in grave medical emergencies the wealthy people in Glasgow send to Edinburgh for consultants, and that there are only two consulting surgeons in Glasgow, and two consulting physicians. Dr. Black has some very strong remarks on the frequent practice in Glasgow of calling general practitioners into

consultation. We do not agree with him here. The time has passed for sharp lines of demarcation between the general- and the consulting practitioner. The law recognises no such distinction. The general practitioner is no longer the mere menial of the physician to make his medicine and bleed his patients. The law recognises in the general practitioner an educated man, whose function it is to give medical advice and professional aid. It would be discreditable indeed to us, as a body, if all the hardly-earned experience of general practitioners did not entitle and fit them to be consulted occasionally by their brethren, or if the jealousy of their brethren did not permit them to be consulted; and we have no sympathy with the language of Dr. Black on this point. It is very fit that there should be a class of pure consultants; but they are not made in a day, or by graduation at school, or by the fellowship of a college. It is vain to expect the public to respect such school-made distinctions, or to decline the services in consultation of respectable practitioners, because they have not yet seen their way clear to commit themselves entirely to the chances of the consulting sphere of practice; and it is vain to expect the public to respect the profession until members of the profession have learnt to respect each other and each other's qualities and experience, without regard to the artificial distinctions which have ruled too much in the profession. We agree with Dr. Black in lamenting that Fellows of the Faculty visit in abundance, and that in carriages, for eighteenpence; that Licentiates of the Faculty visit for sixpence, and extract teeth for threepence. Clearly nothing that the Legislature can do will save the dignity of men who can so forget themselves. The evil of special hospitals, which is rampant in Glasgow, is denounced in very plain language; but we must say that the language is not stronger than the case demands.

MEDICAL ORATORY.

THE silent "Spectator," were he now among us, would doubtless, in his perambulations of this city, find his way into one or more of our medical societies, and might possibly find subject-matter for more than one amusing paper in the manner of the several orators to whom he listened. We believe that many *habitués* of the medical societies get fully as much amusement as instruction from their attendances at these meetings, and the zest is enhanced greatly by the utter unconsciousness of the providers of the entertainment.

First, there is the patronising speaker, who cannot rise in any part of the debate without premising "how much we ought to be obliged to Mr. A or Dr. B for his interesting communication," and this quite regardless of the fact that a vote of thanks for a paper is always moved from the chair, and that the President, when he thinks necessary, can add any special laudatory remarks. He is good enough to patronise everybody, quite irrespectively of the subject's age, or position in the profession, as compared with his own; but is yet candid enough to point out with sufficient minuteness the errors which they, in his opinion, have committed.

Then there is the attitudinising speaker, who rises with majestic air and thoughtful brow, and in a studied attitude delivers an harangue obviously committed to memory beforehand. Let no man disagree with him, for his scorn is withering!

Another variety is the funereal speaker, who appears always to utter truisms *de profundis*. Yet more trying to his audience is the speaker who pauses so long between his words that his neighbours feel inclined to illustrate acupuncture in his person; but this is as nothing in comparison with the suffering inflicted by the fluent speaker, who appears to regard a scientific society as a debating club of very small calibre, and who is on such excellent terms with himself that he is quite unable to appreciate the loathing and nausea produced in his audience by his jocular efforts, and his *ad captandum* method of treating every question.

The President of a medical society is probably the individual in it most to be pitied, since he is obliged to preserve a grave and courteous demeanour under circumstances which would lash any ordinary mortal into sarcastic outbreaks, such as occasionally fall from the Bench when the Bar has tried its patience too far. In mercy to these respected gentlemen, if not to their fellow-members, we trust that in future all medical orators will endeavour to speak briefly and *ad rem*.

THE DENTAL PROFESSION.

LAST week Mr. Charles James Fox read before the Odontological Society of Great Britain a paper "On the position of Dental Surgery as a profession." After combating the notion that dentistry was merely a trade, and not a profession, by showing how necessary a liberal education was in order that a dentist should occupy and hold his proper position with the public, Mr. Fox alluded to the system of advertising in the public journals, which brought the dental profession into so much disrepute, especially in the provinces. Advertising he regarded "as an admission of incompetency, or at least as a public announcement that the advertiser is wanting in some one of those qualities which are needed to make a successful practitioner." Mr. Fox's proposed cure for all the evils under which the dental profession at present labours is registration and compulsory education, and the following is an outline of his scheme:—

1. That, after a certain date, registration of the dentist should be rendered as compulsory as it is upon the medical practitioner by the Act of 1858.

2. That every dentist in practice or student of dentistry prior to that date should be entitled to register.

3. That anyone possessing a medical diploma, and practising dentistry prior to the date fixed, should be entitled at any time to register.

4. That after the date fixed, no one should be registered unless he possesses the dental diploma of the College of Surgeons, and any such general medical qualification as may be determined on.

These propositions, it will be observed, partake somewhat of the provisions of the Apothecaries' Act of 1815, by which all medical men in practice before that date were made legalised practitioners, and also of the registration system introduced in 1858. We wish Mr. Fox all success in his efforts to elevate his profession, and particularly in his crusade against the advertising dentists.

MEDICAL FEES.

THE Shropshire Ethical Branch of the British Medical Association, under the able guidance of Dr. Styrap, has just done good service by preparing and publishing a suggested tariff of fees for the guidance of medical practitioners, and especially young practitioners, in their charges to patients of all classes. Three scales are drawn: the first for the occupiers of houses worth from £10 to £25 of annual rent, the second for the occupiers of houses worth from £25 to £50, and the third for those whose houses are worth from £50 to £100. The charge for a single visit is made to range from 2s. 6d. to 10s. 6d. A scale is also given by which medicines, if supplied, may be charged for; but the Council of the Branch strongly advise the abandonment of this practice. We need not say that we cordially agree with them; and fully concur in their recommendation that

medical men should found their claim to remuneration solely upon the value of their time and skill, and should altogether ignore the objectionable system of "drug payment."

Disputes about medical charges arise, we think, in most instances, from a prior determination to quarrel about something or other with a doctor whose services the patient has ceased to value, and whom he has made up his mind no longer to employ. When this is the case no settled tariff will be of any avail, except as a means of dislodging an assailant from a cover of which he is not entitled to avail himself. But in any dispute that is *bonâ fide*, and that both parties wish to settle amicably and fairly, the labours of the Shropshire Branch cannot fail to be highly useful; and we think the best thanks of the profession are due to Dr. Styrap and his colleagues for the care and attention that have manifestly been bestowed upon their work.

THE CLINICAL SOCIETY.

THE meeting on the 11th inst. was very numerously attended, and great interest was shown in the cases of skin transplantation and grafting which were brought forward by Mr. Pollock, Mr. Lawson, and others. So much attention, indeed, did this subject attract, that no time remained for the reading of other papers upon subjects of importance, which had been announced for the same evening, and which will therefore have to stand over till the meeting on the 25th. Some half-dozen patients, exemplifying the effects of the new operation, were assembled in the anteroom. To see, as one did in several instances, a person who had been the subject of "a bad leg of four or five years' standing," which had been completely cured in as many weeks by the transplantation process, was to feel convinced that M. Reverdin's operation opens out a new era in surgery. Great interest was shown in a case brought forward by Mr. T. Smith, in which it is supposed that a young man has been affected with syphilis through the instrumentality of vaccination. This case was referred to a committee, who will give a careful report upon it.

The subject of the safety (or danger, we suppose) of subcutaneous injections is likely to be brought forward, we understand, at the next meeting.

THE PATHOLOGY OF TINEA DECALVANS.

ONE of the most debated points in cutaneous pathology is the parasitic origin of tinea decalvans, certain authorities as is well known, ascribing it to simple atrophy of the hair-bulbs, and others to the attack of the microsporon Audouini. A recent writer, Dr. Duhring, of Philadelphia, has given the results of his observations in a practical little paper in one of the American journals, and affirms that no parasite is to be discovered in the diseased hairs of tinea decalvans. Only can he find the effects of a sudden arrest of nutrition from some cause, and a rapid wasting and death in consequence, due most probably to the atrophy of the papilla itself. But he makes this important statement, that about the roots and shafts of all hairs, normal or diseased, varying with the case, there exists an appreciable amount of sebum, broken-up epidermic cells, and *débris*. When subjected to the action of a reagent, the sebum has a tendency to split and break up into fine particles, and these often adhere so closely and with such tenacity to the hairs, as to accurately resemble spores; and he thinks that it is to these deceptive little particles of sebum that the name of microsporon Audouini owes its existence. We do not doubt that in many cases the appearance described by Dr. Duhring has been mistaken for fungus element. But it is still asserted by some that a rue microsporon exists in tinea decalvans, an opinion based upon evidence other than that afforded by the mere *appearance* of spores, which might be accounted for by the presence of fatty particles. The general features of this form of tinea, occurring in those who have vigorous growths of of dark hair, and in the young especially; its apparent contagiousness, as exemplified, for instance, in the epidemic at the Hanwell schools investigated by the late Dr. Hillier; the absence of any sufficient cause to account for atrophy; its coexistence with other forms of tinea; and especially the results of germination, by which mycelial filaments are produced,—all these at least lend much weight to the parasitic theory of its origin. We refer, of course, not to general area, but to the localised form of alopecia. It seems to us that dermatologists have to determine whether there is not a minute form of fungus present, and especially attacking the papilla, so causing its atrophy, and which is easily overlooked. It is asserted by some that what is termed *débris* by the Germans is in fact fungus. At all events, Dr. Duhring has done good service in calling attention to a condition of sebum which often misleads careless observers, and which may readily be mistaken for a fungus.

Dr. Bristowe has lately added the weight of his opinion to those who hold that the disease is non-parasitic, and he mentions a very important fact in support of his view—viz., his inability to discover anything but the evidence of atrophy in the follicles of a portion of the skin removed from a woman who had suffered from tinea decalvans during life. Dr. Bristowe thinks Dr. Hillier might have been mistaken in diagnosis, but the latter was a very accurate observer, was very familiar with cutaneous diseases, and might have erred in diagnosis in a solitary case, but scarcely in so many dozen instances as occurred at the Hanwell schools. So far, however, as the positive evidence goes at present, it is certainly against the parasitic nature of the disease.

ANTISEPTIC DRESSING.

SOME short time ago we drew attention to the advantages of a material contrived by Mr. Westhorp, and called by him "marine lint." It consists of a combination of animal and vegetable fibres, very finely carded, and intimately mixed by machinery, and saturated with tar. This has been largely used in the hospitals at the seat of war, and letters which we have seen from Captain Brackenbury, and others, speak most favourably of the estimation in which it is held by the surgeons, on account of its deodorising properties. The material has been improved by the addition of a paper backing, which makes it more convenient to use, and renders the dressing nearly waterproof. The "antiseptic dressing," as this preparation is now called, is prepared in sheets, from which a portion of suitable size has only to be cut, and applied, without further preparation, to the wound. It gives out a somewhat strong, but not disagreeable, tarry odour. The chief advantages of this dressing are its cleanliness, its ready application, its deodorising qualities, and its economy. The price of the material is 1s. 9d. a pound. We think there are sufficient grounds for a very careful trial of the preparation in the wards of our hospitals generally. It has been employed for some time past in St. George's Hospital.

THE COLLEGE OF SURGEONS' DIPLOMA.

WE are glad to find that the Secretary of the College of Surgeons has embraced our recent suggestion and effected an alteration in the arrangement of the signatures of the examiners on the diplomas issued from the College, rendered necessary by the fact that the President is no longer a member of the Court. In the diplomas issued this week to the newly-made Members, the printed words "President"

and "Vice-Presidents" are omitted, but the names of the vice-presidents are bracketed together, and their title written in ink, space for the remaining eight examiners being found below, with Mr. Solly's place left vacant, that gentleman being absent on leave.

A close inspection of a bran-new diploma has convinced us that the new arrangement of signatures has been arrived at by simply and cheaply "stopping out" the words "president" and "vice-presidents" in the original copper-plate; and no doubt a limited number only of these diplomas has been printed in order to supply what the College authorities believe to be an exceptional want. We, however, venture to hope that 1870 will not be the last, though it is the first year, in which the President of the College shall not be a member of the Court of Examiners.

THE VACANCY IN THE SENATE OF THE UNIVERSITY OF LONDON.

AT the meeting of the annual Committee of Convocation of the University of London, held on Friday, the 11th, after some discussion, it was considered unadvisable to take any active steps to promote the election of a graduate to fill the vacancy in the Senate caused by the death of Dr. Miller until the meeting of Convocation in May; or, in other words, it was thought not desirable to summon a special meeting of Convocation for the purpose. The graduate members of the Senate representing arts and laws on the one side, and medicine and science on the other, are equal in number at the present time; and, according to a tacit understanding existing upon the point amongst the graduates, by which representatives of the two sections are alternately nominated, a medical graduate should be selected on the present occasion to fill the vacancy. At present no candidates are in the field, nor have any been named as likely to be put in nomination. It is very important that Convocation should, in the event of deciding in favour of the election of a medical graduate, take care to secure the election of one who holds sound and liberal views on the great question of medical reform; and we venture thus early to impress this point upon the attention of the medical graduates.

THE DARWINIAN THEORY.

THE last number of *Nature* contains a very interesting paper, by Mr. A. W. Bennett, entitled, "The Theory of Natural Selection from a Mathematical Point of View," in which he points out that the Darwinian theory really consists of two distinct portions, one of which may be admitted, while the other is denied. The first portion is that with which the name of Darwin is popularly associated, although its origination is by no means due to him—namely, the probable ancestry of all forms of living organisms from a single, or a few original germs; the other portion, and that which we especially owe to his genius, is the theory that the infinite modifications of existing forms owe their origin to a process of natural selection from spontaneous variations. It is this second portion that Mr. Bennett attacks. He objects, in the first place, that the theory does not even attempt to explain the most inexplicable phenomenon in the development of these organic changes—namely, the first commencement of a tendency to variation, and he then proceeds to consider the phenomena of mimicry or mimetism, so strongly relied on by all Darwinites. Now two data may be considered as established in respect of this: first, that the passage from the ordinary to the mimetic form is effected by a number of exceedingly small steps; and, secondly, that each step must present some advantage to the species undergoing it. He takes as an example the remarkable one given by Mr. Bates in his "Lepidoptera of the Amazon Valley." Here certain gaudy butterflies, the Heliconidæ, enjoy exceptional immunity from the attacks of birds, in consequence of their emitting a poisonous secretion. A particular species of Leptalis, which belongs to a wholly different family, the Pieridæ, so closely simulates the Ithomia, one of the Heliconidæ, that it also escapes unharmed. Mr. Bennett points out the number of steps that must necessarily occur in the transformation, and the extremely little value that those at the opposite extremities of the chain—those, namely, constituting the first stages of deviation from the Pieridæ, and those constituting the last stages of approximation to the Heliconidæ,—would have in preserving the life of this species, and he calculates the chances of the several individuals, in the long succession of modified butterflies between the Pieridæ and Heliconidæ, propagating the particular variation in question, and shows it to be in the highest degree improbable. Our space precludes our following the steps of Mr. Bennett's argument; but we commend it to the study of our readers, and shall be curious to see Mr. Darwin's reply.

DR. LIVINGSTONE.

SIR R. MURCHISON stated at the inaugural meeting of the winter session of the Royal Geographical Society, on Monday evening, that a considerable portion of the supplies forwarded from Zanzibar to Ujiji, where Dr. Livingstone was last heard of, must have reached their destination. It is satisfactory to learn, added Sir Roderick, that the native traders from the interior to the coast continue to believe in the doctor's existence, some saying that he had gone to Karagive, others that he was at Ujiji still. Caravans daily expected at Zanzibar by Dr. Kirk (writing on the 29th of August) would doubtless bring direct news of the great missionary explorer.

"Let us hope," said Sir Roderick, "that before this session closes we may once more see the handwriting of our undaunted traveller, though I am persuaded he will never try to return to his home until he has solved the great problem of whether the southern lake waters, which he has followed up so pertinaciously, do really run into the Albert Nyanza of Baker, and therefore into the Nile."

In addition to the sum of £1000 advanced by her Majesty's Government, and an equal sum advanced by the Government of India, for the purpose of providing Dr. Livingstone with fresh supplies, Sir Roderick announced that considerable sums of money for the same object had been placed at Dr. Kirk's disposal by Mr. James Young, the long-attached friend of Dr. Livingstone.

THE BREAK-UP OF THE ENGLISH AMBULANCE.

WE have just ascertained that there is every probability that the British ambulance, which proceeded from this country, *viâ* Havre, to Versailles, will be broken up. It was under the direction of Deputy Inspector-General Guy, with a staff of medical officers, to whom permission had been accorded for the purpose by the War Minister. A hospital was opened at Versailles, containing eighty beds, and about fifty sick German soldiers were admitted; but it was found that the medical officers of the Prussian service claimed the right to inspect the hospital, and alter the diets or treatment of any patient, without reference to the English surgeons. The latter felt that they were placed in a perfectly false position, and many of them desired to resign their posts. Accustomed to habits of discipline and subordination themselves, they felt that their German *confrères* were not altogether incorrect, however, in asserting their right to exercise such supervision. The subject was brought

to the notice of the German authorities as courteously as possible; but in the end all the sick were removed. Dr. Guy despatched Surgeon Manley and half the staff and *matériel* to Orleans. The hospital of the English ambulance was much visited during the time that it remained open, and the excellent arrangements, order, and cleanliness called forth a good deal of praise. It contrasted very favourably, we are assured, with all the other war hospitals in its vicinity.

THE MEDICAL CLUB.

THE Medical Club is about to change its *habitat*, and to enter, we hope, upon a new and extended career of usefulness and activity. The Committee have secured the premises now in the occupation of the Union Bank, at the corner of Pall Mall East and Suffolk-street, and will enter upon them after the necessary alterations have been completed, somewhere about August next; the present house in Spring-gardens having to be abandoned by the end of September. It is intended also to open wide the doors of the Club, and freely to admit the members of other learned professions, or any gentlemen of equivalent status, and to take some more general name than the present. In the meanwhile the terms of admission will remain as they now are until the 1st January, 1871, after which date they will be raised. Members of the profession who desire to join the Club should, therefore, lose no time in carrying their wishes into effect.

PHYSIOLOGY OF THE PANCREATIC SECRETION.

M. BERNSTEIN gives, in the just published *Arbeiten aus der Physiologischen Anstalt zu Leipzig*, the results of a series of investigations, conducted under the superintendence of C. Ludwig, on the physiology of the pancreatic secretion. In opposition to Claude Bernard, he thinks that perfectly natural and healthy secretion can be obtained from dogs in which a permanent fistula of one of the ducts has been established; since he found that the fluid thus obtained was able to convert starch into sugar, to emulsify fat, and to digest albumen, or, in other words, to convert it into peptone. He finds, in accordance with previous observers, that the activity of the gland undergoes variations standing in direct relation to the ingestion of food, the quantity of the secretion discharged increasing immediately after food has been taken, and attaining its maximum about two or three hours after a full meal; it then diminishes to the 5–7th hour, when it again augments slightly, and finally falls to zero at the 15th hour. His most important investigation, however, was in reference to the influence of the nerves on the secretion. He found that the production of nausea greatly diminished the flow of the secretion, whilst actual vomiting almost entirely arrested it, the effect lasting for a considerable period. He was thence led to try the effect of irritating mechanically and otherwise the pneumogastric nerve, and believes he has ascertained that any centripetal irritation of this nerve arrests the flow of the pancreatic secretion—that is to say, exerts an inhibitory influence on the activity of the gland.

HEALTH OF CONVICTS.

THE Report of the Directors of Convict Prisons, which has recently appeared, shows that 99 deaths occurred out of a total of 8343 male, and 15 out of a daily average of 1184 female prisoners. There are, as usual, very voluminous reports from the medical officers of each prison, many of which are written with very great care and precision. But the Home Secretary appears to have no available medical staff to summarise these reports, and so to draw from them some useful practical conclusions. As matters now stand, no comparison can conveniently be made between the death-rate at one prison as compared with another; as to the variety of diseases to which certain classes of convicts are particularly liable; or as to the sanitary results of the solitary system, and many other matters that bear directly on questions of hygiene. This is the more important because the directors of prisons have recently been entrusted with the charge of the Colonial gaols, and so if a medical inspector were appointed in connexion with this department, and in association with the health office of the Privy Council, a great deal of very useful material might be gleaned from these reports, which are, in their present piecemeal form, comparatively worthless.

THE NEW UNIVERSITY OF GLASGOW.

WELL done, Glasgow!—to have built an edifice for all the great purposes of a university, including provision for William Hunter's Museum, in two years, at an estimated cost of £427,000. More than a quarter of a million of money has already been raised. Of this huge sum upwards of a hundred thousand pounds was raised in Glasgow itself. A hundred and twenty thousand more was given by Mr. Disraeli's Government, and at least £90,000 is still wanted to complete the hall and build a hospital. There are two or three individuals to whose exertions this grand achievement is mainly due—the Venerable Principal Barclay, Mr. A. Orr Ewing, and Professor Allen Thomson, though it must be admitted that they have been ably backed by the munificence of their fellow-citizens. There is hope of a city, with all its faults and defects, which can make such provision for the cultivation of science and intellect as is implied in this splendid university. We have only to wish this new building a success worthy of the past history of the university so honourably identified with Reid, Black, Watt, and Adam Smith.

HASLAR HOSPITAL.

GEORGE MACKAY, M.D., Deputy Inspector of Hospitals, who has been attached to the Haslar Hospital since December, 1865, has been permitted to retire from active service with the honorary rank of inspector, and will, we hope, receive special acknowledgment of his services from the Admiralty, since his retirement is due to injury of his health received in the discharge of his duties. Deputy Inspector James J. L. Donnet, M.D., who has been for the last three years in charge of the Jamaica Hospital, will, we understand, be appointed to Haslar; and, pending his arrival, Deputy Inspector Thomas Nelson, M.D., at present on half-pay, will undertake the duties. Dr. Donnet's successor is not yet appointed.

PROPAGATION OF SCARLET FEVER.

AN application has been made at the Wandsworth police station for advice under the following circumstances. A gentleman's servant had contracted scarlet fever in her master's house, where there had been five cases. As soon as she was convalescent, but long before the process of peeling was complete, he wished her to be removed to her father's house. But the father naturally objected, on account of the danger to his other children. The magistrate told the master that he could discharge his servant at any time.

This, however, it appears to us, was not the real question. The master may have power to discharge his servant at any moment by fulfilling the conditions of engagement, but the law does not authorise him to endanger the lives of other persons by turning her out of doors. This young woman may infect a score of people on her way

home, and may start a new centre of infection when she gets there. It seems to us that this is an indictable offence at common law, even if there were no special Act upon the subject, since no man has a right to endanger the public health in so direct a way.

PARALYSIS OF THE INSANE.

IN the recently published Naval Medical Blue-book, Deputy-Inspector Dr. Macleod, R.N., the officer in charge of the Royal Naval Lunatic Asylum at Great Yarmouth, makes the following important observations on this disease, from which one-sixth of the patients suffer, the average life of such patients being two years from the date of entry.

"The prevailing impression is, that paralysis of the insane is a disease brought on by hard living and general debauchery. The previous history of the different patients under treatment will not support this belief; as a rule, the very best men, whose certificates for years have on them 'very good,' are those who are struck down by it, and if any of them become slaves to different vices, and give evidence of insubordination, it is the *result* and not the *cause* of the disease.

"One occasionally meets with individual cases who, while they labour under the incipient symptoms of the disease, and before they manifest decided symptoms of insanity, have failed in conforming to the discipline of the Ship or Marine Corps; and as, unfortunately, the true cause of such change was not suspected, not only did the character of the individual suffer, but in some cases his pecuniary interests were sacrificed. Acts committed under diseased action of the brain lost to him years of good conduct, and it may be his half-pay. When, therefore, an officer, seaman, marine, or boy, is found suddenly to give way to habits of intemperance, or breach of discipline, punishment should never be inflicted until the medical authority in the ship is fully satisfied that there is no progressive brain or spinal disease going on. From the first inroad of the disease, I have every reason to believe that there is a difference of 1° between the morning and evening temperature in all individuals afflicted with paralysis of the insane. I would strongly recommend to my brother officers the frequent application of the thermometer in this form of disease to assist in the diagnosis."

Dr. Macleod's conclusions are as follows:—

"1st. In all cases of paralysis of the insane, there is a higher temperature in the evening over the morning, seldom less than 1°, except in those cases where the disease is arrested, which occasionally happens; then it may be as low as ·10°.

"2nd. That the thermometer shows the progress of the disease when it cannot be satisfactorily discovered by any other means.

"3rd. That in noisy, sleepless, and destructive patients, the temperature is higher than it is in those who are quiet and easily managed."

ABERDEEN INFIRMARY.

THE managers of this institution held a meeting on Monday to consider a report regarding the proposed improvements of the lunatic asylum. These improvements (according to the report) would consist chiefly of an extension of the east wing of the building, and several important external alterations. The accommodation thus provided would admit from sixty to seventy additional patients. The cost, excluding £100 for heating apparatus and furnishings, was estimated at £2850. The meeting adopted the report, and the Managing Committee were authorised to carry out the proposed improvements.

POOR CHILDREN'S DINNERS.

THE season of the year is coming at which the newspapers teem with appeals to the benevolent to subscribe towards funds for giving a good dinner of hot meat, once or twice a week, to half-famished children. There are three or four organisations engaged in this good work, and we do not care to specify any one of them, as being more worthy of support than the rest. But we do wish very cordially to recommend this particular form of charity to our readers; and we would urge them not only to give of their superfluities, but also, as we have done ourselves, to go and see how well the money is laid out, and how thoroughly the gift is appreciated. Such a children's dinner-party is a spectacle that cannot be imagined, and that, when once seen, will not readily be forgotten.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

WE venture to remind our readers that a general meeting of the Poor-law Medical Officers' Association will be held at the Freemasons' Tavern on Tuesday, November 29th, at 7.30 P.M. We are informed that the indefatigable Chairman will review the last Report of the Poor-law Board, and will be prepared to rebut Mr. Goschen's statement that the services of the English medical officers are confined to the destitute classes actually in the receipt of relief. The following subjects will also be discussed: the Registration of Disease, the Consolidation of the Sanitary and Poor-law Service, Mr. Brady's Scheme for Amended Medical Relief, and Mr. W. H. Smith's Parliamentary Notice of Motion on Poor Relief. As the present is a crisis in Poor-law medical affairs, we trust there will be a large attendance at the meeting.

THE FLYING SQUADRON.

IN THE LANCET of October 30th and of November 6th of last year, very decided references were made to certain cheeseparing arrangements as to coal and water in the Flying Squadron, at that time visiting ports in South America. Before this week's journal appears it is probable that the arrival of Admiral Hornby with his squadron will be reported; and it will be satisfactory to know from the gallant officer that the daily allowance of about three half-pints of water for drinking purposes at the time referred to was a fiction, and not a fact.

FEMALE MEDICAL STUDENTS AND THE EDINBURGH INFIRMARY.

AT the conference held on Monday between the managers of the Edinburgh Infirmary and their medical and surgical staff, Professor Hughes Bennett, Dr. G. W. Balfour, and Dr. Heron Watson spoke in favour of admitting female students to the wards at the usual hour of visit; while opinions adverse to the innovation were expressed by Professors Maclagan, Laycock, Sanders, and Lister; Drs. Haldane, Gillespie, Grainger-Stewart, Claud-Muirhead, Argyll-Robertson, Duncan, and Fraser; and Messrs. Walker, Annandale, and Joseph Bell.

ASYLUM FOR IMBECILE CHILDREN AT LARBERT.

THE Scottish National Institution for the Education of Imbecile Children—an institution in which especial interest is taken by her Majesty the Queen—continues to prosper. At the annual meeting of the committee at Aberdeen on the 11th inst., it was stated that the inmates under treatment were now seventy-eight. Of these, twelve girls had been converted into creditable domestic servants; and thirty-four boys were making good progress in industrial handicrafts. In 1864 the annual revenue of the institution was £498; but last year it reached £1720. These results cannot but attract, as they certainly deserve, even more liberal support to the institution, which is not yet self-sustaining.

THE MEDICAL OFFICER OF ST. PANCRAS AND VACCINATION.

A FEW weeks ago some most reckless charges were preferred against Mr. Hill, one of the medical officers of the St. Pancras Workhouse. It was stated that he had vaccinated dying children with the object of taking his fees, and that he had vaccinated others against the consent of their parents, who affirmed that their children had already been vaccinated. After considerable delay, the guardians proceeded to hold a public inquiry, and we rejoice to learn that the result is an honourable acquittal of Mr. Hill on every point.

THE Lord Provost of Glasgow presided on the 11th inst. at a meeting of the Police Board, to consider his lordship's motion for the purchase of thirty-three acres, at the cost of £17,000, with the view to erecting thereon a temporary, and ultimately a permanent, Fever Hospital for the city. The urgent necessity for such an institution was impressively enforced by several speakers, and the motion was carried with but one dissentient. Convalescent patients are to be provided with recreation grounds on the site.

MRS. GLADSTONE announces that the admissions to her Convalescent Home since March 29th have been 3118; the average number in the Home during the summer was 73; and that the daily cost per head of these was 1*s.* 5*d.*, equivalent to an annual charge of £1877. The amount of annual subscriptions is £384; hence there has been a necessity to draw upon capital—a fact to which Mrs. Gladstone invites public attention.

ON Nov. 9th, Mr. Alderman Spencer, M.D., J.P., and President of the Lancashire and Cheshire Branch of the British Medical Association, was elected Mayor of the borough for the second time. — Dr. William F. Rooke, of Scarborough, has been elected to the office of Mayor in that town.

THE Council of University College have decided to appoint an Assistant Special Professor of Clinical Medicine in University College Hospital, whose particular duty will consist in thoroughly grounding the students in auscultation and other methods of physical diagnosis.

DR. JAMES DICKSON, whose premature decease we lately noticed, has been succeeded as surgeon of the West Dispensary District in connexion with the Dundee Royal Infirmary by Dr. Alexander C. Campbell.

THE number of medical students who have matriculated in the Edinburgh University up to the 15th inst. is 526—a larger number than that matriculated during the first fortnight of last year.

THE Caterham Asylum, one of the new institutions erected under the auspices of the Metropolitan Asylums Board, was opened on Tuesday last by the Bishop of Winchester.

THE *Globe* states that, in consequence of an outbreak of small-pox in Shoreditch, the guardians have been compelled to purchase a chapel at Hoxton, and fit it up for small-pox cases.

MR. JOHN ALLEN RAMSAY, of Great Shelford, near Cambridge, and Mr. J. D. Eames, of Pulham, Norfolk, have received the Government gratuity for efficient vaccination.

THE London scarlet fever epidemic has exhibited signs of abatement during the last four weeks, the deaths having been successively 192, 167, 174, and 150.

A GERMAN SURGEON ON THE WAR, AND VOLUNTARY AID SOCIETIES.

OUR correspondent with the German army writes to us from Wiesbaden, whither he had proceeded to recruit his strength, while convalescing from an attack of typhus fever, probably contracted, he thinks, from the sick of an ambulance at a little village near Paris. It appears certain from his account that the Germans have been suffering a good deal of late from diseases of an epidemic character, although these can scarcely yet be said to have assumed the formidable proportions of an epidemic. It is a somewhat remarkable fact that the Germans camped around Metz suffered a good deal from dysentery, and to a very slight extent from typhus fever; but in the case of those before Paris and at Orleans this has been reversed, for typhus fever prevails among them. In the opinion of our correspondent, the development of the disease in the latter localities is to be attributed to the troops having occupied buildings of a solid construction, while before Metz they were lodged in *baracken*. It is certain that typhus has spread most among those troops who have been most comfortably located in houses at Orleans, and in the vicinity of Paris. He considers that the Germans before Paris must have at least 1000 cases of typhus fever, but that the death-rate averages only from 3 to 5 per cent. He speaks of an ambulance with which he was connected as being fortunate in having obtained some of the finest buildings—castles and large houses,—with good ventilation, and vast rooms for the occupation of the sick, but they were not without many cases of typhus under treatment. The catholic sisters assisted the medical officers in every way possible, and they consequently did not feel the absence of dressers and assistants belonging to the voluntary aid societies. Our correspondent, writing from a German point of view, evidently entertains anything but friendly feelings towards these societies. He complains that the sick were totally neglected by the "Johanniter Order." Although this order is charged with furnishing sick and wounded soldiers with refreshment and other necessaries, which are supplied at home with such prodigal liberality, but few of the gifts reached the soldiers in the field, or at a distance. On a previous occasion, at the commencement of the war, he had to make the same complaints; and his later experience has been of a similar kind. He alleges that the sick and wounded of the ambulance to which he was attached obtained none of the food and comforts of which they stood so much in need; and this experience was quite similar to that which obtained in other ambulances. The convalescing sick, and the wounded capable of being removed, are evacuated as soon as possible at the nearest railway station. To that end they have to travel for one or more days by various vehicles. Unfortunately there was a great dearth of convenient or suitable carriages, and the consequence was that the sufferings of the sick and wounded soldiers, often transported in open carts under rain and storm, were extreme. The counts and lords, he indignantly adds, were meanwhile probably enjoying a good dinner in a warm room, and giving little thought to the sick. It occurred to himself to have to wait five days on one occasion at a station, and three days at another, because he could get no vehicles at all suitable for removing wounded men. The "Johanniter Order," whose members are princes, counts, and other people of the old nobility, have not sufficient knowledge or administrative capacity to be of much service; and he estimates their sympathy with the sufferings of the common soldier at a very low figure. Why did not the administrating head, he asks, procure a sufficient quantity of transports, and send his knights, with a number of vehicles, to the several stations at which the sick must touch on their journey? The Order, according to him, is charged by the Government with the arrangement of all matters concerning the sick and wounded, except the attendance on them in hospital.

Our comment upon these complaints would be this. The Government ought to be charged with the responsibility of making all its own arrangements for the care of the sick

and wounded soldiers of its own army. From the experience we have had during this war of the various voluntary aid societies, we are not disposed to rank their labours as very efficient. Partly from lack of experience and organisation, partly from the jealousy they excited among military medical men, partly from the abuses to which the "red cross" was subjected, from being assumed by all sorts of people, under all sorts of circumstances, there has been a terrible waste of money and energy. It is a lamentable fact —but fact we fear it is—that all attempts at softening the horrors of wars by neutral powers are liable to misconstruction, and possible mischief. The duty of taking care of the sick must devolve upon the Government employing the troops who have become disabled in its service. The most that can be done is to supplement State aid in various ways, and under circumstances where it would be impossible for the Government to do so, or vain to expect any Government to afford the requisite amount.

Correspondence.

"Audi alteram partem."

SANITATION IN INDIA.

To the Editor of THE LANCET.

SIR,—Miss Nightingale has been so good as to send me the enclosed letter, written, you will observe, for publication in your journal, in reply to what Miss Nightingale is good enough to call my "kind and gentle criticism."

I am glad to find that this very influential writer had no intention or desire to throw cold water on the inquiry in defence of which I wrote. I wish, however, to state that I was not singular in thinking such was likely to be the effect of Miss Nightingale's observations.

In conclusion, I wish your readers to understand that the inquiry in defence of which I took up my pen was not the one instituted by the Sanitary Committee of the War Office, of which Miss Nightingale "was one of the first and strongest advocates," but that more special inquiry suggested by the Senate of the Army Medical School, and now being carried on by Drs. Cunningham and Lewis.

I am, Sir, your obedient servant,

Royal Victoria Hospital, Netley. W. C. MACLEAN.

To the Editor of THE LANCET.

SIR,—In your number of Oct. 29th you inserted a kind and gentle criticism from Professor Maclean on certain parts of my "few words" appended to the last annual India Office Report on sanitary measures.

Since the outbreak of this most terrible of all earth's wars, I have had a hard time of it in defending others, and I have not had the least little moment to defend myself. Still, Sir, if you will allow me, I should wish to say that Professor Maclean seems to have read from a point of view opposite to that which was in my mind when writing these "few words." And I am glad that he has given me an opportunity, with your permission, to explain them.

My object was, as I need scarcely say, purely practical. It was to deprecate a tendency complained of by all of late years (this very complaint came to me from India)—viz., the tendency to base sanitary proceedings on theory. Dr. Maclean appears to think that I question the propriety of the cholera inquiry now proceeding in India. I was one of its first and strongest advocates. I strenuously urged the granting of necessary funds to carry it out; and I consider it one of the most important public Indian inquiries which has been ever undertaken on our subject. The very importance of it lies in this: if a fact is proved, it ceases to be theory. The inquiry in question is to ascertain, as far as may be, what *is* fact. This was the meaning of the passage which Dr. Maclean interprets as implying "ridicule" on my part.

What I said about the present state of the fungoid theory I learnt from the published report of Drs. Cunningham and Lewis; about the ground water, from Dr. Townsend's Report on Cholera in the Central Provinces. These statements are not theories, but facts. If they are facts, they cease to be theories. The theories remain just where they were. Of course, if the theories were found on longer inquiry to be true, they too would be no longer theories, but facts; and as such would afford good ground for expending public money in applying the *facts* to save life.

The case of Jenner, cited by Dr. Maclean, is in reality my case. Jenner first started a theory; but the Vaccination Acts, with the costs and penalties, were not enacted until Jenner's theory had become a fact by long experience.

We all have the same object in view—viz., saving human life. This cannot be done without expenditure. And as theories are many and uncertain, all we ask is, that the public should know what we are spending their money for. This, the said cholera inquiry will, perhaps more than anything else, help to tell us.

Also, in what I said about cholera excreta, I simply dealt again with the facts. Dr. Bryden has shown in his Report on Cholera, p. 214, that the dry-earth system, which, in its application, would prevent the dangers of putrid cholera excreta, had not stayed the ravages of cholera. Hence, Dr. Bryden himself calls in question the theory. And I have done no more.

At p. 59, para. 170, of the Report for 1869 by the "Sanitary Commissioner with the Government of India," just received, the results of dealing with cholera excreta are stated as follows:—"With regard to the effect of the careful disinfection and safe disposal of evacuations which seem to have been generally practised, there is no evidence to show that any results can be professedly attributed to them."

Since Professor Maclean's letter appeared in THE LANCET of Oct. 29th, I have received Dr. Lewis's able and most interesting report, the first instalment of the scientific inquiry into cholera which Dr. Maclean fears my remarks may injure. It confirms the former joint reports of Drs. Lewis and Cunningham by a host of microscopic examinations and drawings, from which the following conclusion (No. 3, p. 164, Sanitary Commissioner's Report) is deduced by Dr. Lewis:—"3. That no special fungus has been developed in cholera stools, the fungus described by Hallier being certainly not confined to such stools." But these are the theories which have hitherto occupied the attention of the observers.

Even this information, though most important, we shall not, however, receive as final. We must inquire into objections, and ask further questions. The real inquiry is only about to begin. Mere controversy is here useless.

With many apologies for writing so long a letter, which, had I had more time, I could have made shorter,

Pray believe me, Sir, your faithful servant,

London, Nov. 14th, 1870. FLORENCE NIGHTINGALE.

*** We have been compelled to omit the publication of Professor Maclean's letter (in type), replying to Dr. Morehead's communication of last week, in order to find the necessary space for the insertion of the above.—ED. L.

TORSION OF ARTERIES.

To the Editor of THE LANCET.

SIR,—In the paper by Mr. J. D. Hill, on "Torsion of Arteries as a hæmostatic method" in your impression of the 5th inst., I remark that, in the description he gives of the operation as performed by Amussat, he makes no mention (nor indeed does either Mr. Bryant or Prof. Humphry in their several papers referred to by Mr. Hill) of the special pair of forceps by which the vessel was fixed before being twisted. This instrument, called by Sédillot "pince à rafoulment," and by Malgaigne "pince à baguettes," is figured in the medium operation of the former author. It consisted essentially of a forceps, with branches terminating in smooth cylinders, with which the vessel was seized transversely to its long axis, after being drawn out and freed from the surrounding textures; compression of the arterial coats by its means then led to the division of the two internal ones, whilst their separation and rolling back was facilitated by slight traction on the free end of the artery.

In the modification employed by Mr. Hill, one blade of the forceps is placed within, and the other without, the

vessel. It is remarkable that this is a method which Dupuytren has specially cautioned us against employing, in the following words:—"On doit éviter avec soin d'introduire dans la cavité de l'extremité libre de l'artère, l'un des bouts de la pince, avec laquelle on doit la tordre; un seul côté étant comprimé, il s'y ferait une crevasse des trois membranes, et l'hæmorrhagie ne serait point avertie." ("Leçons Orales," iv., 209.)

I am, Sir, your obedient servant,

Princes-square, Nov. 8th, 1870. HENRY W. KIALLMARK.

THE REGISTRATION OF DISEASES.

To the Editor of THE LANCET.

SIR,—In your valuable leading article of November 12th, in which you advocate the registration of diseases, mention is several times made of the relief-books of the Poor-law medical officers, and the uses which might be derived therefrom. These so-called relief-books, so far as the country unions are concerned, consist merely of loose sheets which hold good for one month only, at the expiration of which short time the medical officer loses sight of them altogether.

I cannot help thinking it would be of great convenience to Poor-law medical officers, were relief-books issued to them instead of loose sheets. Were this done a duplicate sheet could be forwarded weekly, as at present, to the guardians, and an extract to any central authority. At the same time the medical officer would be enabled to refer back to any information he might require. At present the loose sheet travels by post no less than seven or eight times a month backwards and forwards; whereas if a duplicate sheet were detached from a book, a considerable expense would be saved.

Another great drawback to the present arrangement, and one calculated to interfere with the proper registration of diseases, is that the medical officer is expected to state the number of "new cases" which he attends each week, by which is meant "cases not before attended during the current half-year." How can this be properly or correctly done unless the relief-book is kept by the medical officer instead of the guardians?

I am, Sir, your obedient servant,

J. E. GRINFIELD-COXWELL, L.K.Q.C.P.I.,

Nov. 1870. Medical Officer for Heavitree, Devon.

CHANGES AFFECTING GENERAL PRACTITIONERS.

To the Editor of THE LANCET.

SIR,—The professional sphere of the general practitioner undergoing a rather anomalous alteration in range and character; his territory is being yielded, his rights and interest taken in open day, and to this he submits dumbly, if not graciously. The anomaly of this attack and silent surrender is remarkable, evidencing as it does the audacity of the attacking, and the mute sinking of expediency and ancient privileges by the attacked, party; and this in connexion with the enforced preparatory course of education, fitting the general practitioner for better sustaining his present tenure of duties, and for extending the range of his professional operations. Yet with this expanding education to better equip and fit him, his sphere of labour is proportionately contracting around him; smaller and smaller it gets, dwindling to the meanest focus. And the same hands are pulling both cords—the same collective wisdom that urges a higher standard of education issues the edict, Take from him functions and privileges so creditably sustained heretofore; making a logical issue of this kind: train him to fitness, qualify him, and then deny his qualification. This is equivalent to increasing the price of an article, and then depreciating its value. This preamble applies to the pupilage of the medical student, and to the contemplated institution of so-called "State medicine." Indeed, are not all qualified practitioners recognised by State law? As though the highly educated and duly accredited practitioner was not calculated to make a post-mortem, or to judge of healthy or unhealthy organs. This suggestion certainly cannot be regarded in the light of a direct compliment to the general practitioner, or, indeed, to the medical bodies granting diplomas of qualification. As to pupilage, formerly the qualified practitioner held a mutual relationship with the hospital teachers and examiners in forming the future doctor. Now, the courts above affect to ignore the relationship and utility of that great branch of the profession, the general practitioners, in connexion with doctor-formation. This is a very serious home-thrust at their privilege and position; are they agreed to accede to this? It must be generally admitted that a youth, on leaving school, and passing his preliminary examination at sixteen or seventeen years of age, had better by far spend two or three years with a medical man, learn pharmacy, and see general practice, than to proceed at that early age, with schoolboy ideas, to the unrestrained life of a hospital student; thus pupilage would be better for pupil and parent or guardian. Pharmacy, being a compulsory subject, could be more effectually acquired during an apprenticeship than in any other way. To say that there is want of system and scientific order in the teaching, is merely begging the question. But this imputation I deny; at any rate they learn the order which they in turn as practitioners will pursue, and if the hospital method cannot be observed in practice, as your plea would have it, then it is clear which course has the stronger claim. In the pupilage course there is maintained the mutual relationship of the several orders of the profession; and the non-representative hospital officials and members of the Medical Council, with their one idea, would not show their social art, surgically, by amputating and alienating the great mass of the profession—would not insult the most important order of the profession by tacitly declaring their inefficiency in tuition in the embryo doctor line. Let general practitioners unitedly oppose this innovation. Their consent to this meddling has not been solicited or granted; ergo, disallow the right of the Medical Council, as constituted, to represent the profession, and oppose their measures as affecting them. As to State medicine, this is the emanation of an advanced M.D. to further deprive ordinary surgeons of rights and privileges to which they are entitled by efficiency. The State medicine man, be it observed, is a privilege not to be held by a surgeon, but a M.D. Thus, a young M.D., with a surcharge of vanity, comes as a supervisor, and steps over well-qualified surgeons, takes his post-mortems, his medico-legal cases, inquests, and juries, &c., effectually ignoring the knowledge and official capacity of the ordinary practitioner, and depriving him of any emoluments which might fairly accrue to him from those sources; and all this in the face of the very high standard of general medical training. Is this to be tolerated? Surely the ordinary practitioners have sufficient power, if they will act unitedly, to frustrate this attempt at purloining their rights and privileges.

I am, Sir, your obedient servant,

Cornwall, Nov. 7th, 1870. MEDICUS.

OIL OF PEPPERMINT AS A LOCAL ANÆSTHETIC.

To the Editor of THE LANCET.

SIR,—A few years ago, when in China, I became acquainted with the fact of the natives, when suffering with facial neuralgia, using oil of peppermint, which they lightly apply to the seat of pain with a camel-hair pencil. Since then, in my own practice, I in the same way frequently employ oil of peppermint as a local anæsthetic, not only in neuralgia, but also in gout, with remarkably good results; indeed, the relief from pain I have found to be almost instantaneous.

I am, Sir, your obedient servant,

ALFRED WRIGHT, L.R.C.P. Edin.

Finchley, N., November 14th, 1870.

GLASGOW.

(FROM OUR OWN CORRESPONDENT.)

WE have had a busy week here. The new University buildings were inaugurated on Monday. The Duke of Montrose, the Chancellor, presided, and the dignitaries both of the city and University were present; the Rector, Lord Derby, alone being absent. The ceremony was simple,

but effective. The Common Hall not being yet built, it took place in a most spacious hall designed to contain the museum, the foundation of which you are aware was the munificent gift of the famous William Hunter. It is gratifying, considering what has occurred so recently in other places, to be able to say that the conduct of the students was marked by exemplary moderation. The medical class-rooms are on the eastern side of the quadrangle; they are large and well-lighted, with ample adjoining accommodation for museums, illustrative apparatus, and every facility for teaching and demonstrating which modern science and improvement could suggest. The rooms for practical anatomy and the chemical laboratory are detached from the main building, but connected with it; they are very spacious, and chiefly lighted from the roof.

The University authorities are surely to blame in being so tardy with the erection of the new hospital, not a stone of which is yet laid. The consequence is that great inconvenience and positive injustice to the students must accrue from the distance between the Infirmary and the College. To remedy this evil as far as possible, a service of omnibuses has been instituted.

On Tuesday, Dr. Young, Professor of Natural History, opened the medical session. The greater portion of his address was devoted to the somewhat knotty questions of medical reform. His treatment of the subject, to judge from the reports in the local papers, was not such as to render it very interesting to an audience of undergraduates. The learned professor, from the fact of his being a medical man, but not engaged in practice, had the advantage of viewing the subject from a purely speculative stand-point, altogether untrammeled by considerations of what is practicable; accordingly he indulged himself in the luxury of erecting some fine, though rather grotesque, *chateaux en Espagne*. His central idea, as far as I can judge from the address as reported, was that we ought to adopt some modification of the German system.

The rapid spread of fever, chiefly of the relapsing type, has at last roused the authorities to energetic action. They have just concluded the purchase, at a cost of £17,000, of thirty-three acres of ground, about two miles east of the centre of the city, on which they intend to erect, without delay, temporary accommodation for fever patients, and also a permanent fever hospital.

Last summer the directors of the infirmary made an important alteration on the close system, which had long existed, of giving clinical lectures, by throwing the privilege open to the whole medical staff. No doubt the changes are very well in theory. They are now being brought into practical operation. I shall watch attentively and keep you informed on the working of this bold and rather unpopular experiment.

Glasgow Nov. 12th, 1870.

Obituary.

DR. JOHN CAMPBELL, STAFF-SURGEON.

IT is with regret we announce the death of this old and respected member of our profession. Dr. Campbell was a native of Argyllshire, and the eldest of three brothers, who were members of the medical profession. The subject of this obituary entered the Army Service in 1812 at an early age, and saw a large proportion of foreign service. He served with distinction throughout the Peninsular war, and was present at the battles of Busaco, Albuera, Vittoria, &c., and gained warm commendation for his service. After the battle of Waterloo, Dr. Campbell was with the army of occupation until its retirement from France, when he was appointed assistant-surgeon to the 2nd West India Regiment, and afterwards transferred to the 24th, which he accompanied to India. There he served for many years, doing duty part of the time as surgeon to St. George's Hospital, Madras, returning home on sick certificate in 1836, when he was appointed surgeon to the 93rd Highlanders, with which he served in Ireland and Scotland, accompanying it to Canada, and returning with the regiment in 1850, when he retired from active service. He then received the appointment of surgeon to the Military Prison at Greenlaw, near Edinburgh, where he continued till 1865, when, by the rules of the service, and from increasing infirmities, he retired to Edinburgh to spend his remaining years. He died at Portobello, N.B., on the 26th ult.

JOSEPH GEDGE, M.B.

WE regret to have to announce the death of Mr. Joseph Gedge, M.B., of Caius College, Cambridge, son of Mr. Johnson Gedge, Bury St. Edmunds. He was Physician's Registrar at Addenbrooke's Hospital, and Demonstrator of Histology in the University medical schools. He went as medical officer with the expedition under the command of Sir Samuel Baker, had made with the main body of the expedition the difficult passage of the Desert of Dongola, and had reached the station between Khartoum and Gondokoed. His death was first announced by telegram from the correspondent of *The Times* at Alexandria, and it has been confirmed by intelligence just received through the Khedive's Minister of the Interior. Mr. Gedge was an accomplished and a well-informed man, and combined with a thoroughly scientific knowledge of his profession a sound acquaintance with the practice of it. He was an enthusiast in natural science, much esteemed in the university, and an earnest, single-hearted, upright man.

WILLIAM A. HUBERT, M.R.C.S.

THIS highly respected medical practitioner was lately found dead in his bed, at his residence, Markyate-street, Dunstable, Beds. The *Bucks Herald* states that Mrs. Hubert was from home at the time of the occurrence, and that the unfortunate gentleman was discovered dead by the servant who went to call him in the morning. The deceased was fifty years of age, and on the day prior to his death seemed to be in good health, going about his business as usual. His loss will be greatly felt in the neighbourhood.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having passed the required examinations for the diploma, were duly admitted Members of the College at meetings of the Court of Examiners on the 15th and 16th inst.:—

Allnutt, William, L.S.A., Portsea.
Applin, George P., Addiscombe.
Archer, George Ernest, Feltwell, Norfolk.
Ball, James B., Dublin.
Beatson, William, Camberwell.
*Brooks, J. Edwin, L.R.C.P. Edin., Silverdale.
Burgess, W. F. R., L.S.A.
Burroughs, John E. B., Lee, Kent.
Clarke, John S., Liverpool.
Crowther, William E., Hobart Town.
Douglas, William T. P., M.B. Cantab., Banbury, Oxon.
Drake, Francis H., Pontefract.
Evans, Edward B., Swansea.
Fox, Hugh C., L.S.A., Stoke Newington.
Franklin, George C., Leicester.
Garratt, William, Madras.
Gosse, Charles, Adelaide, South Australia.
Gray, George J., Stoneh use.
Hammond, William, Howden, Yorkshire.
Harris, Michael, Hackney.
Harrison, Richard, St. Lawrence-road.
Jackson, T. Scoresby, M.B. Edin., Whitby, Yorkshire.
Johnson, William J., Worksop, Notts.
Jolly, Robert, M.D. and F.R.C.S. Edin., Birmingham.
Larkin, Frederick G., Heath, near Canterbury.
*Love, A. E. B., L.S.A., Vauxhall-bridge-road.
Martin, Henry C., M.B. Edin., Reigate, Surrey.
Morris, Henry, Queen's-terrace.
Morris, Malcolm A., Twickenham.
Mummery, John H., Cavendish-place.
Noott, William M., L.S.A., Cardigan.
*Orton, Edw. W., L.R.C.P. Edin., Foleshill, Warwickshire.
Palmer, Henry D., Olney, Bucks.
Ritchie, William, M.D., Dublin.
Roche, Eleazar B., Norwich.
Vasey, Charles Lyon, L.R.C.P., Cavendish-place.
Walker, George E., Quorndon, Leicestershire.
Wotton, Henry, Plymouth.

* Passed in Surgery at previous meetings of the Court, and, having subsequently obtained medical qualifications recognised by the College, were admitted Members.

Seven other candidates were examined on the above-named days, but failed to satisfy the Court, and were referred for a period of six months' further professional study.

APOTHECARIES' HALL. — The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Nov. 10th:—

Andert:n, John Heyes, Leigh, Manchester.
Cotterell, William, West Port, New Zealand.
Love, Augustus Edgar Burch, Vauxhall-bridge-road.
Skrimshire, Frederic William, Holt, Norfolk.

As Assistants in Compounding and Dispensing Medicines:—

Fowler, W. Ratcliffe, East Kirkby, Spilsby, Lincolnshire.
Robertson, George, London Hospital.

The following gentleman also on the same day passed his first professional examination:—

Watson, Charles Russell, Univ. Coll. Hospital.

NAVAL MEDICAL SERVICE. — The following are the names of the successful candidates who passed the recent competitive examination for admission into this service held at the London University between Nov. 7th and 10th, in the order of merit in which they passed, and with the number of marks obtained:—

	No. of Marks.
Coppinger, Richd. Wm., M.D. Queen's Coll., Cork	2060
Robson, Wm. Edw., Royal Coll. of Surg., Ireland	1700
Biddulph, Robert Walter, M.B. Trin. Coll., Dublin	1340
Jennings, John, Queen's Coll., Cork	1290
Allen, Marcus, Dublin University	1205
Beaumont, Henry, Royal Coll. of Surg., Ireland	1130

HUNTERIAN SOCIETY.—At the next meeting of the Hunterian Society, on the 23rd inst., at 8 P.M., at the London Institution, Finsbury-circus, Mr. D. de Berdt Hovell will read a paper "On Hysteria," in which the following propositions will be maintained:—1. That the disease called hysteria has no necessary connexion with the uterus. 2. That it is essentially a condition of depressed physical and moral power; and all the phenomena of the disease are produced by irritation in some form or other superadded to that condition. 3. That the ill-defined, obscure, intractable qualities of the disease are mainly due to the hypothesis of uterine irritation, and the malpraxis which ensues therefrom. 4. That the difficulties of the subject are entirely due to the preconceived opinions with which it has so long been regarded. When these have been abolished, the disease will at once become simple and tractable. Members of the profession interested in the subject are invited to join in the discussion.

UNIVERSITY COLLEGE STUDENTS' CHRISTIAN ASSOCIATION.—The annual meeting of this Association was held on Thursday evening, Nov. 3rd. About forty students were present. The chair was taken by Dr. F. T. Roberts, assistant-physician to the hospital, who gave an interesting and earnest address to the students. The president, Mr. H. J. Benham, who we may say, has just taken the first place in honours in anatomy, both at the College and the University, then briefly explained the objects of the Association, after which the Rev. Dr. Stebbing, Dr. Gowers, and Messrs. Smith, Read, Barlow, and Maxwell addressed the meeting.

THE Secretaries of State for Commerce and for War, in Berlin, are taking measures to place warming stoves in railway carriages intended for the conveyance of the wounded during the winter. The compartments will be padded, and the invalids protected from the cold. The large sheds erected in Berlin for the reception of the wounded are now also carefully heated.

YELLOW FEVER IN SPAIN.—Letters from Barcelona report the state of things there as mournful in the extreme; half the shops are shut, and a great portion of the place is no longer inhabited. The suburbs, on the contrary, are crowded, as are also the large camps which have been made on the neighbouring mountains for the poor.

CHEMICAL SOCIETY OF BERLIN.—This society has published a series of instructions for effecting disinfection in large buildings, and especially hospitals. There are eight series, and in each of these, the proper disinfectants for every emergency are carefully pointed out.

THE late Miss Eleanora Atherton, of Kersall Cell, and Quay-street, Manchester, and of Great James-street, Middlesex, has left the following charitable bequests to medical institutions:—£1000 to St. Mary's Hospital, Quay-street, Manchester; £1000 to the Manchester Royal Infirmary and Dispensary; and £500 each to the Eye Infirmary, Manchester; Asylum for Idiots, Earlswood; Royal Hospital for Incurables, Putney; and the British Home for Incurables, Clapham-rise.

Medical Appointments.

BAKER, J. P., M.R.C.S.E., has been appointed Surgeon in Ordinary to the Western General Dispensary, Marylebone-road, vice Wm. Hickman, M.B., F.R.C.S.E., resigned.

BAUMGARTNER, J. R., M.R.C.S., has been appointed Resident Accoucheur to King's College Hospital.

CAMPBELL, A., L.R.C.P.Ed., L.F.P. & S.Glas., has been appointed Medical Officer and Public Vaccinator for the Parish of Morven, Argyleshire, vice P. MacNaughtan, L.R.C.S.Ed., deceased.

CAMPBELL, A. C., M.B., L.R.C.S.Ed., has been appointed Surgeon for the West District of the Dundee Royal Infirmary and Dispensary, vice J. Dickson, M.D., deceased.

CHITTENDEN, C. P. D., L.R.C.P., L.M., L.S.A., has been appointed Resident Obstetrical Officer at Charing-cross Hospital, vice J. D. Robinson, M.R.C.S., appointed Resident Surgical Officer.

GERRENE, W., L.R.C.P.L., M.R.C.S.E., has been appointed House-Surgeon to the Queen Adelaide's Dispensary, Bethnal-green-road, vice E. Colden, M.R.C.S.E., resigned.

HAYES, T. C., L.S.A., has been appointed House-Physician to King's College Hospital.

HOLMES, Dr. H., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Dunamanagh Dispensary District of the Strabane Union, Co. Tyrone, vice Wm. Baird, L.F.P. & S. Glas., deceased.

HUGHES, W. R., L.R.C.S.I., has been appointed Assistant House-Surgeon at the Birkenhead Borough Hospital, vice Richard Crean, L.K.Q.C.P.I., L.R.C.S.I., appointed House-Surgeon at the Clayton Hospital and Wakefield General Dispensary.

LACK, T. L., M.R.C.S.E., has been appointed Medical Officer for District No. 2 of the Forehoe Incorporation of the Poor, and the Hardingham District of the Mitford and Launditch Union, Norfolk, vice J. Thos. Tallent, M.R.C.S.E., resigned.

LA TROBE, F. S., M.R.C.S.E., has been appointed Medical Officer for the Ash District of the Eastry Union, Kent, vice H. J. Shirley, F.R.C.S.E., resigned.

LEIGH, R., M.R.C.S.E., L.S.A., has been appointed Junior House-Surgeon to the Liverpool Southern Hospital, vice Little, promoted Senior House-Surgeon.

LETT, F., L.R.C.P.Ed., M.R.C.S.E., has been appointed Junior House-Surgeon to the Royal Free Hospital, Gray's-inn-road, vice Evariste Genouf, L.R.C.P.Ed., M.R.C.S.Ed., resigned.

LITTLE, W., L.R.C.P., M.R.C.S.E., has been appointed Senior House-Surgeon to the Liverpool Southern Hospital, vice Davies, resigned.

M'CALLUM, E., L.F.P. & S. Glas., has been appointed Medical Officer and Public Vaccinator for the Parish of Stronsay, Orkney, vice W. Rendall, L.F.P. & S. Glas., resigned.

M'KENZIE, J., M.R.C.S.E., has been appointed Certifying Factory Surgeon for the District of Rocester, Staffordshire, vice E. Alsop, M.R.C.S.E., deceased.

NICHOLSON, Dr. W., has been appointed Resident Clinical Assistant at the Hospital for Consumption and Diseases of the Chest, Brompton, vice Hind, whose appointment has expired.

NOAKES, S. S., M.R.C.S., has been appointed Resident Medical Officer at Charing-cross Hospital, vice C. Gosse, M.R.C.S., whose period of office has expired.

ROBINSON, J. D., M.R.C.S., has been appointed Resident Surgical Officer at Charing-cross Hospital, vice W. K. Rix, M.R.C.S., whose period of office has expired.

ROPE, H. J., M.R.C.S., has been appointed House-Surgeon to King's College Hospital.

WESTMORLAND, J., L.R.C.P.Ed., &c., has been appointed Medical Officer and Public Vaccinator to the No. 4 District of the Manchester Union, vice Walsh, resigned.

Births, Marriages, and Deaths.

BIRTHS.

CHESTNUTT.—On the 5th inst., at Aboghill, Ballymena, Ireland, the wife of J. Wallace Chestnutt, B.A., M.D., L.R.C.S.Ed., of a son.

GILL.—On the 13th inst., at Walkley, Sheffield, the wife of Dr. Wm. Gill, of a son.

INGLIS.—On the 13th inst., at Malvern Lodge, Gipsy-hill, the wife of Walter W. Inglis, M.R.C.S.E., of a son, still-born.

SANSOM.—On the 12th inst., at Duncan-terrace, Islington, the wife of A. Ernest Sansom, M.D., M.R.C.P.L., of a son.

PERKINS.—On the 16th inst., at St. Sidwell's-street, Exeter, the wife of J. Shirley Steele Perkins, M.R.C.S.E., of a daughter.

MARRIAGES.

ALLFREY—SMITH.—On the 10th inst., at the Parish Church, Maidstone, Charles Henry Allfrey, M.D., F.R.C.S.E., of St. Mary Cray, to Emily Malden, daughter of Thomas Heckstall Smith, F.R.C.S.E.

SINCLAIR—WALTON.—On the 15th inst., at Dalton-in-Furness, William Sinclair, M.D., of Barrow-in-Furness, to Mary, only daughter of the late Rev. Henry N. Walton, of Ireleth, Lancashire.

DEATHS.

RIX.—On the 14th inst., Sarah Ann, wife of Charles James Rix, M.R.C.S.E., L.M., L.S.A.L., of Manchester, aged 49.

ROBERTS.—On the 9th inst., Dr. Wm. Lloyd Roberts, of the Hospital, Festiniog (to the great grief and sorrow of a numerous circle of dear relatives and friends), aged 26.

SHANNON.—On the 9th inst., at Rosslea (of malignant scarlet fever), Elizabeth Annie, youngest child of Thomas E. Shannon, M.D., aged 5 years.

TUBBS.—On the 11th inst., in London, William John Tubbs, Surgeon, of Upwell, Cambridgeshire, aged 59.

WIGG.—On the 16th inst., at Southminster, Essex, Laban William, second son of T. Carter Wigg, M.R.C.S.E., aged 13 months.

Medical Diary of the Week.

Monday, Nov. 21.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
METROPOLITAN FREE HOSPITAL.—Operations, 3 P.M.
MEDICAL SOCIETY OF LONDON.—8 P.M. Mr. Clement Godson: "A Polypoid Growth removed from the Vagina." — Dr. John Macpherson: "Cholera Nostras, its History, and its Analogies with Cholera Indica."

Tuesday, Nov. 22.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ROYAL FREE HOSPITAL.—Operations, 3 P.M.
ETHNOLOGICAL SOCIETY OF LONDON.—8 P.M. Dr. Bleek, "On the Concord, and the Origin of Pronouns and Genders"; "On the Position of the Australian Languages."
ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8½ P.M. Dr. John Harley, "On the Endemic Hæmaturia of the S.E. Coast of Africa."—Dr. George Johnson, "On a Case of Traumatic Tetanus; Recovery after Removal of Foreign Body and Administration of Chloral."

Wednesday, Nov. 23.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
CANCER HOSPITAL.—Operations, 3 P.M.
HUNTERIAN SOCIETY.—8 P.M. Mr. D. De Berdt Hovell, "On Hysteria."

Thursday, Nov. 24.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 12; other Operations, 1 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Friday, Nov. 25.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CLINICAL SOCIETY OF LONDON.—8½ P.M. Mr. Brudenell Carter: "Case of presumed Injury to the Ciliary Nerves from a Blow."—Mr. Durham: "Remarkable Case of Spontaneous Fracture of Femur."—Dr. Wiltshire, "On Paroxysmal Hæmaturia."—Dr. Handfield Jones: "A Query as to the Safety of Subcutaneous Injections."—Dr. Silver, "On the Use of Veratrum Viride in Acute Rheumatism."
QUEKETT MICROSCOPICAL CLUB.—8 P.M. Mr. Wm. Ackland: "Notes on a New Selenite Polarising Film."—A Practical Demonstration in Microscopical Injection.

Saturday, Nov. 26.

ST. THOMAS'S HOSPITAL.—Operations, 9½ A.M.
HOSPITAL FOR WOMEN, Soho-square.—Operations, 2½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

Notes, Short Comments, and Answers to Correspondents.

THE REGISTRATION OF DISEASE.

IN his last Monthly Report on the Health of Marylebone, Dr. Whitmore gives a statement of the new cases of disease coming under treatment during the four weeks ending 29th October at ten charitable institutions within the parish. From this it appears that the total number of new cases was 5820, whereof 623 were accidents. Taking, therefore, 5197 as the total new cases of actual disease, we find that 425 of these were treated in the Workhouse Infirmary, 883 by the district medical officers among the out-door paupers, 1647 in the Middlesex and Samaritan Hospitals, and 2243 at six Dispensaries in the parish. This may be taken to be tolerably conclusive as to the importance of getting complete returns from medical charities in any scheme of disease registration. Dr. Puckle, the Lambeth medical officer of health, states in his last Annual Report that the Poor-law medical officers of the parish of Lambeth attended 895 cases of epidemic disease during the year 1869.

Mr. A. J. Atkinson.—We believe the guardians are entitled to give or withhold orders at their discretion, and our correspondent was clearly not bound to attend the case. The Poor-law Board encourages resort to hospitals in such cases; and, if a hospital was accessible, the relieving officer would be technically right in his decision.

THE communication of *W. W.* shall appear in our next impression.

NATURAL PHILOSOPHY PAPERS AT BURLINGTON HOUSE.

WE are glad to observe that the Senate of the University of London have taken action upon the report recently presented to Convocation, and pointing out that the stringency of the Matriculation examination has, especially in certain subjects, been unnecessarily increased. It will be remembered that great complaints—and complaints founded on very just grounds—were made in reference to the papers set in Natural Philosophy. The Calendar of the University of London states that the questions in this subject "will be of a strictly elementary character"; but this regulation has been greatly violated, and even so lately as last June. At the Matriculation examination held last Midsummer, the attention of one of the officials of the University was called to the by far too severe character of the Natural Philosophy paper, and the opinion was hazarded that the results of the examination would probably prove that to be the case. And so it has turned out; for the statistics of that examination recently published tell us that, of the 231 rejected, no less than 210 failed in Natural Philosophy, only 104 failing in Latin, and 101 in English; and what is more remarkable is this, that those who passed in all but one subject numbered 35, and of these no less than 32, passing in all other subjects, were plucked in Natural Philosophy. In a special report of the Senate on this subject, made since the June matriculation, it is admitted that the examination has become more difficult, and the Senate have decided to enforce upon the examiners the necessity of confining the matriculation questions within those limits which are consistent with the elementary character of the examination; or, in other words, to prevent examiners overrating the importance of their particular subjects, which has been done in the case of Natural Philosophy. It is also proposed to give a longer list of questions, a certain number only of which the candidates must answer, so as to afford the student a fairer opportunity of exhibiting the knowledge he possesses. It is quite certain that candidates have been unfairly dealt with in Natural Philosophy of late, and we hope that on this point, in future, matters will be found more satisfactory. It is one that affects a large number of students.

G. R.—We cannot give any information relative to the individual.

THE SICK-CLUB QUESTION.

To the Editor of THE LANCET.

SIR,—In your issue of the 29th ultimo is a letter from "A Country Vicar," who evidently takes great interest in the Sick-Club system. Part of my experience on the subject I venture to send you for the information of the Vicar or anyone else who cares to know it.

I take as an example the Rugeley Medical Club. The members pay 4*s.* 4*d.* per annum each, except in large families. No family pays more than 5*d.* a week, even if there are a dozen in it. In the year 1869, I attended about 410 cases, for which I received £106. In round numbers during the year I paid about 1000 visits, thus giving an average of about 2*s.* 1½*d.* a visit. These visits were paid at all hours of the day and night, at distances varying from fifty yards to five miles. If the actual cost of drugs &c. be deducted, cash received would be about £80, and this brings the average fee for each visit to a little more than 1*s.* 6*d.* What has to be done for this eighteenpenny visit? On one side of the equation is £106; on the other, expenses to be incurred, a host of duties to be performed, and numerous disagreeables to be endured. To enumerate them: Drugs &c. require £35 hard cash; 1000 visits must be paid at all hours, in all weathers, and frequently at great distances; 1172 mixtures; between 4000 and 5000 pills; about 1300 powders; besides plasters and ointments must be prepared; teeth (about 20) must be extracted. Many of those patients who are able (not all) attend at the surgery; and although I have not considered these in my statistics, it is surely worth something to look after these, probably another 1000, certainly two daily—i. e., between 700 and 800.

This is a list of what has to be done, and what was done in the year 1869 for £106. I think that in some Friendly Societies the remuneration is something more; but, as far as my experience goes, always "inadequate." Of course we medical men should be perfectly satisfied if these Societies consisted of working men only. The Rugeley Medical Club is, doubtless, a great boon to the working classes; but the rules of it are very imperfect, and I am quite convinced that it is not "remunerative" as far as I am concerned.

What does "A Country Vicar" mean by a "paying price"? He evidently regards drugs as bought and sold, and puts a certain very low value on travelling, and I should think a very much lower value on medical advice, education, &c. By his notion of remuneration, we medical men perhaps might not *lose* actually money, but we certainly should not *get* very much. If, as he suggests, farmers and tradespeople are to enter Clubs, there is no earthly reason why professional men, and even country gentlemen, should not avail themselves of such "cheap physic." I would merely tell the Vicar that the doctor does not choose to admit other than working men in his Clubs, because he knows they can afford to pay *more* money.

Again, the attendance which is considered unnecessary by the doctor is considered absolutely necessary by the patient, and hence Club doctors are accused of negligence, &c. Although as long as I hold Clubs I trust I may always give the members every requisite and necessary attention, still I cannot help hoping that at some future time I may be able to relinquish such harassing and, in many instances, unsatisfactory work.

I am, Sir, yours obediently,
Rugeley, November, 1870. E. T. TRIPPS, M.D. Lond.

A Woman's Friend and Constant Reader.—The communication is wholly unsuited to our columns. Even if such a suggestion has any legitimate use, its liability to abuse would be a sufficient reason for withholding it from publicity.

CHLORAL HYDRATE IN PERTUSSIS.

To the Editor of THE LANCET.

SIR,—I should be obliged if any of your subscribers would inform me if the chloral hydrate is really beneficial in pertussis, and the dose for children.

Yours respectfully,
November 16th, 1870. MEDICUS.

SMALL-POX AT MILE-END.

THE Clerk to the Guardians of Mile-end Old Town writes to us to complain of a misstatement which he says was made in an annotation in THE LANCET of the 22nd ultimo with reference to small-pox in the Mile-end Workhouse. The clerk expresses the "surprise and regret" of the guardians that we should have said there had been upwards of forty new cases of small-pox in the workhouse under treatment within a month, whereas he alleges that the largest number of new cases in any month since April was 5, and that in the month of October. The statement thus called in question was taken from a report by Dr. Corner, which was forwarded to us marked to attract attention; and seeing that we were careful to specify the source of our information, it only remains for us now to give the guardians the benefit of their correction, leaving them to settle with Dr. Corner the question of fact involved.

N. X.—See notice at the end of the present number.—Our correspondent asks for the name and address of the chemist who prepares Dr. Schuster's tannin and glycerine pastilles for gonorrhœa.

Dr. Peacock's important paper shall appear next week.

ETHICS OF THE PROFESSION.

To the Editor of THE LANCET.

SIR,—In February last (not knowing that my regiment was returning to England so soon) I proceeded to India to rejoin it from leave. I left my wife and family at Kingstown, in Ireland. In March she became seriously ill, and the medical man to whom I spoke in case she required medical aid not being able to attend her, Dr. Joseph Beatty, Royal-terrace, Kingstown, was called in at the recommendation of a friend, who lived next door to him. He continued in attendance from the 13th March to the 30th August, the attendance being a long one, and requiring much care, &c. It was my intention at its conclusion to have sent Dr. Beatty as large a fee as I could afford, although on all previous occasions, when I offered fees to any of my medical brethren for attendance on my wife, they were refused as a matter of course. In order that I might have some guide as to the actual amount I should offer, I detailed the circumstances of the case to you in the beginning of August. Your answer then was that I should not pay a single sixpence, but that I might make a present of some kind, &c. However, Dr. Beatty was not satisfied to allow the matter to remain till the case was concluded, but broached the subject of fees to me. I told him that it was an unusual proceeding for one medical man to demand fees from another for attendance on his wife or family, but without changing his views. I even suggested that he should draw up a statement of the case, and submit it to the Censor of the College of Physicians, and that I would abide by his decision. He declined to do this, and threatened to prosecute his claims to the utmost if I did not comply with his demands. I then made another proposal to him, stating that I had written in June to Calcutta for some money I had there, and that I expected it by every mail; that on its receipt I would pay him £25, and £25 more as soon as I could. That evening he wrote me a note, saying, after mature consideration, he would accept my offer provided the £50 were paid *in cash* on the following day, notwithstanding that I told him that I had not then the money. The following day I received a letter as copied from his solicitor.

Chambers, 23, St. Andrew-street, Dublin,
30th August, 1870.

SIR,—I am directed by Surgeon Joseph Beatty to apply to you for £80, being the amount due by you to him for his fees for attendance on, and professional services rendered, your wife from the 13th March last to this day (both inclusive), and I have to request that you will have that amount, together with 10s. 6d. costs of this application, paid into this office, on or before 12 o'clock on Thursday next, the 1st September, and so save further expense. Your obedient servant,

(Signed) CHAMBERLAIN R. WALKER.

After receipt of the foregoing, I consulted a legal friend, who told me he was well acquainted from family relationship with the profession; that such a proceeding was quite contrary to the usual etiquette, yet he felt called upon to advise me to settle the matter if possible. Fortunately on my return from Dublin to Kingstown I received the expected remittance from India, which enabled me to carry out the advice thus given, and which resulted in my paying down £50, as the following receipt will show:—

Received from Frns. Holton, Esq., M.B., the sum of fifty pounds, being in full discharge of my demands for all fees due me for attendance &c. on Mrs. Holton from 15th March up to and including the 30th August last.

Dated this 1st day of September, 1870.

£50 0 0. (Signed) JOSEPH BEATTY, L.R.C.S.I., &c.

Dr. Beatty's conduct in this matter has been so diametrically opposed to that of every other medical man who has been kind enough to attend my wife during the past fourteen years, that I feel constrained to lay it before the profession in general through the medium of your columns.

I remain, Sir, yours faithfully,

F. HOLTON, A.B., M.D.,
Portsmouth, Nov. 10th, 1870. Surgeon, 77th Regiment.

To the Editor of THE LANCET.

SIR,—As a constant advocate of that professional courtesy which we owe to one another in our mutual relations, will you oblige me by inserting the following facts, which I do not feel justified in passing over in silence?

I had been attending the late Captain —— for about three weeks, and had given the opinion that he was suffering from disease of the heart, liver, and kidneys, accompanied during the latter part of the time by anasarca and ascites. I stated that the case would terminate fatally within a greater or less length of time. I had met in consultation Sir Wm. Jenner and Sir Ranald Martin on separate occasions, and both had agreed with me as to the diagnosis and prognosis. On the 31st ultimo a friend of Captain —— called, and asked me if I would meet his own medical attendant, Mr. Bryant, of 23 A, Sussex-square, or his son, as the former was out of town, and I agreed to do so. A message was sent to me the next morning (1st instant), at 11, requesting me to meet Mr. Bryant, senior, at 12. Much to my own inconvenience I kept the appointment; and after waiting more than half an hour, Mr. B.'s friend drove to his house to see if he had arrived in town, and came back saying that "Mr. B. and his son had left home in their carriage half an hour before." I then saw my patient, and found him *gradually sinking*; and on leaving (as I imagined Mr. B. must have been delayed by some urgent case, and wished to extend to him a similar courtesy to what I expected for myself), said, "If Mr. B. comes, by all means let him see Captain ——, and if he can suggest anything, let him communicate with me." On making my visit the next day (2nd instant), as usual, another friend of Captain —— came into the room, and informed me that Mr. B. and his son had called the evening before, and that the former had given it as his opinion that Captain —— was not suffering from heart disease, that he had immediately punctured his extremities, had ordered poultices to be constantly applied, &c., and had also stated that Captain —— had, even then, a chance of recovery! This friend also said it was their wish, therefore, that Mr. B. should continue his attendance, and that I should retire from the case. A day or two after, I wrote a letter to Mr. Bryant, requesting an explanation. Mr. B. replied, asking me to favour him with an interview, which I did; but regret to add that I merely received a more or less general denial of any want of professional courtesy on his part. I fail to understand—

1st. How Mr. B. can excuse himself for seeing my patient and giving an opinion without first communicating with me. He alleges that he was not aware that anyone was in attendance, though he could not deny that he knew that an appointment was made to meet me at 12 on the morning of the 1st instant! Besides, it came out at our interview that while I was in attendance, his son, a surgeon, had twice visited my patient, unknown to me; and as Mr. B. drove away from home *with his son* in the morning, whilst I was expecting him every minute at Captain ——'s, he could not very well have remained ignorant of the fact.

2ndly. As to what took place on the evening of the 1st, *in my absence*, the expression of a dissentient opinion and of a different prognosis, and the wonderful activity displayed by Mr. B., which were all calculated to lead to an impression on the minds of the friends present that I had neglected to do what was necessary,—all seem to me to require a more satisfactory explanation than I have yet received.

As a sufficient contradiction to Mr. B.'s opinion, I may merely add that, in spite of his prognosis, Captain —— died the next day (2nd instant), and that, to the best of my belief, no post-mortem examination was made, though the friend whom I saw on the 2nd assured me he would take care there should be such an examination "to see which doctor was right."

I am, Sir, your obedient servant,

Euston-square, Nov. 14th, 1870. W. S. RIDING, M.D.

M.R.C.S. Esq., (County Limerick.)—The coroner is the judge in his court, and has absolute discretion as to whether he shall call any medical witness, and, if so, whom.

THE O. W. FUND.

DR. RICHARDSON begs to acknowledge the following additional subscriptions to the above Fund:—

W. Martin, Esq.	...	...	£1	1	0	T. Bryant, Esq.	...	...	...	£1	0	0
White Cooper, Esq.	...	...	1	0	0	Dr. Gull, F.R.S.	...	...	...	2	2	0
Dr. Habershon	...	...	1	1	0	Dr. Radcliffe	...	...	...	1	1	0
Dr. Westall	...	...	2	0	0	W. Calthorp, Esq., Withern				1	1	0
T. Turner, Esq., Manchester			1	1	0	Dr. M'Intyre, Odiham	...			1	1	0
E. Lund, Esq., ditto	...		1	1	0	Rev. Dr. Bell, Goole	...	...		2	0	0
Dr. D. Thorp, Cheltenham.			2	0	0	John Simon, Esq., F.R.S.				1	1	0
Dr. Cogswell	...	...	2	0	0	R. J. Pollock, Esq., Wimbledon		...	...	1	1	0
Dr. Goddard Rogers	...	...	1	1	0	T. Hunt, Esq.	...	...	...	1	1	0
Dr. Gream	...	...	5	0	0	Dr. Morell Mackenzie	...			2	2	0
J. F. Clarke, Esq.	...	...	1	1	0	Dr. A. Carpenter, Croydon.				2	2	0
Dr. Wilkinson, Sydenham.			1	0	0	P. A. Bonney, Esq.	...	...		1	1	0
Dr. Robert Barnes	...	...	1	1	0	R. V. Harvey, Esq., Lincoln				2	2	0
W. Daniell, Esq., Stony Stratford	...	...	1	1	0	Dr. Forbes Winslow, D.C.L.				3	3	0
Dr. Leonard, Norwood	...		2	2	0	Arthur Durham, Esq.	...			1	1	0
R. Quain, Esq., F.R.S.	...		2	2	0	A. L.	...	...	...	1	0	0
Dr. Bissett Hawkins	...	...	1	1	0	Lawson Tait, Esq., Birmingham		...	...	0	5	0
Dr. Gardiner Hill	...	...	0	10	6	Mr. Brady, M.P.	...	...	...	2	2	0
Dr. Desmond, Liverpool	...		1	1	0	Dr. Dowse	...	...	...	1	1	0
Dr. Millar	...	...	2	2	0	Sir Chas. Locock, Bart.	...			10	0	0
E. Bartleet, Esq., Birmingham	...	...	1	1	0	Dr. A. W. Barclay	...	...		1	1	0
Dr. Donald Fraser	...	...	1	1	0							

R. S. P. T., (Dorset.)—We fear not. The fee is probably intended as a remuneration for loss of time whilst in attendance on actual labour.

Mr. Linton.—1. The gentleman named is a properly qualified practitioner.—2. Yes.

MEDICAL WITNESSES.

To the Editor of THE LANCET.

SIR,—I was summoned before Mr. Knox, at Marlborough-street, to give evidence in a case where a cabman had driven over and slightly injured a lady's foot on the 27th ult. The lady, who was brought to this hospital, was but little hurt, and this I told the magistrate. The cabman was ultimately sent for trial to the Clerkenwell Sessions, charged with drunkenness and careless driving. Previous to this, at Mr. Knox's request, I again examined the lady's foot, and repeated my former opinion, adding that with a day or two's rest she would be quite well. On this account I begged the sergeant who accompanied her to try and excuse my attendance at the sessions. I was, however, subpœnaed by the Middlesex magistrates; and after kicking my heels in the murky court for two of the longest days I ever spent, I again repeated my opinion. The cabman was found not guilty, and so the case ended so far as he was concerned. But to my astonishment, when I applied for my fees, I was told that, owing to the unimportant nature of my evidence, I could not be paid; and this after being made to appear against my will, under a penalty of £100, and neglecting my duties for two whole days! I have written to the magistrates for an explanation; but receiving no reply, I have placed the facts before you, trusting you may think them of sufficient importance to be made public.

I am, Sir, your obedient servant,

W. K. RIX, House-Surgeon.

Charing-cross Hospital, Nov. 15th, 1870.

*** Our correspondent is legally entitled to half a guinea for attendance at the police court, and two guineas for attendance at the sessions. If the magistrate's clerk refuses payment, application should be made to the Home Secretary.—ED. L.

SPECIALISM IN GLASGOW.

It seems quite clear that specialism in Glasgow is running wild. It would seem that there are a Chest Hospital, two Ear Hospitals, an Eye Infirmary and the Glasgow Ophthalmic Institution, and a Skin Hospital. A Hospital for Sick Children is proposed. Such a multiplication of charities is enough to demoralise both the poor and the profession.

THE NAVAL MEDICAL SERVICE.

To the Editor of THE LANCET.

SIR,—On Saturday last the result of the examination held at the London University for the naval medical service was announced. Here it is. *Nine* candidates competed (?) for *twenty-five* vacancies! *Six* were found qualified!

This miserable fact speaks for itself. Surely the eyes of the Admiralty must be now opened, when after all their advertising, and in the teeth of the fact that no vacancies existed in the India or Army service, only six eligible candidates could be tempted to go in for what has now come to be considered "the refuge for the destitute." Poor youths! I congratulate them, and in a short time I'll sympathise with them. They will soon want the latter. It is not probable that the universal dislike to the naval medical service depends on one point only. There must be an adherence to truth and honesty by the Admiralty for a long time before confidence is restored, also a more liberal reading of some of their rules which come specially hard on medical officers—as, for instance, assistant-surgeons returning from foreign hospitals are denied the privilege of a certain proportion of full-pay leave, though accorded to those who have served afloat.

The great cry amongst all naval surgeons now is, early and liberal retirement. The service would then be more likely at least to attract a sufficient number of highly qualified young surgeons. I am not prepared to say that this would without fail do so; but it certainly would, in the estimation of all with whom I have discussed the point, remove the greatest cause of discontent. I remain, Sir, yours, &c.,

November, 1870. AN ADMIRALTY DUPE.

To the Editor of THE LANCET.

SIR,—Whatever the disadvantages and unpopularity of the naval medical service may be, one thing is certain, that it is in some respects, and especially in a pecuniary point of view, considerably superior to the same department of the army. To begin with: the naval assistant-surgeon commences at 11*s.* a day, while his brother in the army only receives 10*s.* At the end of five years' service they are both in receipt of 12*s.* 6*d.* a day; but at the end of eight years' service the naval medical officer is in receipt of 14*s.* daily, while the army medical officer still gets 12*s.* 6*d.*, and does not receive any increase for two years longer. The surgeon in the navy of eighteen years' service receives 22*s.*, while the army surgeon of the same number of years' service receives only £1 a day. Living in the navy is much cheaper than in the army, the naval assistant-surgeon being able to live for about £4 10*s.* a month; while every farthing of the army assistant-surgeon's pay is required for his expensive mess, band, mess fees, &c. The naval uniform is less expensive than that of the army, and the room on board ship occupied by the naval assistant-surgeon is furnished for him by the Government, while the army medical officer is obliged to furnish his own room in barracks. Promotion is also quicker in the navy, the first, second, and third men of each batch being promoted respectively at the end of the fifth, sixth, and seventh years of service. In the army at the present time there are assistant-surgeons of over fifteen years' service, some of whom are more than forty years of age, and some grey-haired. Promotion in the army is at a complete stand-still, and has been so for the past two years and upwards; and unless something be done to accelerate it, the medical department of the army must lose its attractions for any, except the most apathetic.

The great objection to the navy in the minds of most young medical men is the monotony and confinement inseparable to a seafaring life, together with a lack of professional work. The remedies for the improvement of the naval medical service obviously are—increased pay, increased retiring allowance, more shore duty at naval hospitals, and the abolition of half-pay service, except in extreme and rare cases. If these suggestions be not carried out, the Government may depend upon it that a sufficient supply of medical officers will not be obtained, and those so obtained will not remain in the service. Yours truly,

November, 1870. AN ASSISTANT-SURGEON, ARMY.

To the Editor of THE LANCET.

SIR,—Allow me to point out one or two inaccuracies which occur in your article on "The Advantages of the Naval Medical Service" in your issue of October 15th.

On the subject of half-pay and retirement, you say: "It is here, no doubt, that the attractions are wanting; for it is only after twenty-five years' service, and when his age must be at least close upon fifty, that the staff surgeon can retire upon £400 per annum." If you consider retirement at such an age, and under such conditions, to be a want of attraction in the naval medical service, you will perhaps be surprised to learn that, according to the present regulations, the earliest age at which a staff surgeon can retire is fifty-five, when he will be entitled to £400 per annum, the highest rate of retirement which he can attain in the service, although the chaplain and naval instructor, the paymaster, and the secretary can secure £450 a year by the same length of service, as pointed out by your correspondent, Dr. Munro. Should a staff surgeon be retired from ill-health before the age of fifty, and with twenty-five years' service, the highest retirement which he can obtain is £345 per annum. It wants but little more to make the naval medical service popular with an average number of medical men than the right of retirement at an earlier age, even on the present rate of half-pay; and until this is granted, "a steady stream of promotion" will be impossible, and discontent will never be got rid of.

With regard to a surgeon's prospects of being promoted to the rank of staff surgeon before he has completed twenty years' service, which you seem to think attainable by any surgeon much under this period "if moderately active and fortunate in his opportunities," I can only say that I am not aware that more than two officers with less than twenty years' service have been promoted to the rank of staff surgeon under the Order in Council of February 22nd, 1870, and those were officers of very meritorious service, who wanted, I believe, but a few months of having completed the period of service which would have entitled them to the rank as a matter of course.

I am, Sir, your obedient servant,

October 19th, 1870. R.N.

Indignans.—The excuse which the members of the Council are diligent in spreading abroad, that they were obliged to elect examiners in Surgery as well as in anatomy and physiology, is entirely beside the question. The point was, as they perfectly well knew, that the three examiners should not be Councillors. The article in a contemporary—confessedly from the pen of a Councillor—is about the feeblest defence which could have been made. Mr. Savory's election is sufficiently explained by the fact that when Mr. Paget declined, and Mr. Charles Hawkins and Mr. Hewett were known to be unwilling to undertake the office, direct descent in the Council became a *reductio ad absurdum*.

Dr. Heslop, (Birmingham.)—We regret that the communication arrived too late for insertion this week. Our correspondent's request shall be attended to.

LIVERPOOL INFIRMARY FOR CHILDREN.

To the Editor of THE LANCET.

SIR,—In your issue of Saturday last, your Commissioner, in commenting on the presence of scarlet fever in the Liverpool Infirmary for Children, says: "In the out-patient room of this establishment there is a large daily attendance of children, and we cannot but think that the infection has been propagated in this way. Would it not be desirable to restrict the attendance of out-patients to those suffering from non-infectious disorders requiring continuous treatment, and prohibit the admission of new cases?"

Now, in reference to the above remarks, I wish to state that during the last seven years only two epidemics have occurred in the hospital requiring the closure of the wards—measles some four years ago, and now scarlet fever, both appearing at a time when these diseases prevailed in the town. I cannot call to mind the precise circumstances under which the measles broke out; but the present invasion of scarlatina can be clearly and unmistakably accounted for in a way entirely overlooked by your Commissioner—viz., by the parents of the patients visiting the wards when they had scarlet fever at home.

My main object in writing this letter is to correct the idea that the out-patient department introduces disease into the house, and also to call your attention to the fact that patients with infectious disease are prohibited from enjoying the benefits of the charity. One exception to this rule has been made, as in other hospitals, in the case of pertussis.

I am, Sir, your obedient servant,

Liverpool, Nov. 15th, 1870. MARTIN G. B. OXLEY.

*** It seemed scarcely necessary to inquire into secondary sources of infection when it was obvious that patients labouring under scarlatina were admitted daily in the out-patient department, which, although separated by doors, occupies the very centre of the hospital. The out-patient records proved that several cases had recently attended on the same day, and here and there is a note that objection was taken to their future attendance. The out-patient room is said to receive as many as 100 to 150 patients daily; and, whatever may be the rule of the hospital, in practice it is quite impossible to keep out children labouring under infectious diseases, especially when an epidemic is raging in the town. Once introduced, it is scarcely possible to imagine a more certain method of propagating the disease. We, therefore, endorse the suggestion of our Commissioner, that the out-patient department should be reduced as much as possible during the continuance of the epidemic in Liverpool.—ED. L.

Dr. Shaw, (Staplehurst.)—We do not consider that a medical man would be warranted in asserting that the patient had not suffered from scarlatina. The positive evidence of those who saw him at the time of attack must outweigh any negative evidence obtained at a later date.

W. M. should refer to our advertising columns.

CROWDED CHURCHYARDS.

To the Editor of THE LANCET.

SIR,—If your correspondent at Carlton, Worksop, Notts, will address a letter or memorial to the Home Secretary on the subject, an inspector will, doubtless, be sent to examine into the matter. At least such has been the result of a like application from myself, and nine churchyards closed in consequence. Yours truly,

November 12th, 1870. L., M.D.

A. E. L.—We know of no good systematic work on the subject; but valuable information will be found in an essay by Professor Humphry in "Holmes's System of Surgery."

Hygiene.—Parkes's System of Hygiene; Churchill and Sons.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION, IRELAND.

To the Editor of THE LANCET.

SIR,—I beg to inform you that, in accordance with your valued suggestion, the following regulation has been added to those already proposed by the Poor-law Medical Officers' Association, Ireland:—"That the county representatives shall invite every member of the medical profession in each county to join this Association, their interests (as far as they go) being identical with those of the Poor-law medical officers." It is also proposed that in unions or counties in which, owing to the small number of Poor-law medical officers or other causes, it may be deemed expedient to elect other members of the medical profession, not being Poor-law medical officers, but members of the Association, to be union or county representatives, they shall be invited to take that position by the ballot of the members for that county. The subscription to which you have drawn attention does appear to be very small; but in the aggregate £125 a year (should all the medical officers of Ireland join) would probably cover the general printing, postage, and stationery. The intention is that the medical gentlemen of each county should make arrangements amongst themselves as to what amount would cover the additional expenses for every individual county. I am happy to inform you that the number of answers to the circular already received has exceeded our anticipations, and that Secretaries have been appointed for each province in Ireland. Your obedient servant,

Harrington-terrace, Dublin, Nov., 1870. D. T. T. MAUNSELL.

Dr. John Davies.—All the facts are not before us. It is not said under what circumstances Mr. Thomas was called in or came to see the case. But only very extreme circumstances would justify one surgeon in removing splints from another surgeon's patient, and in pronouncing the limb badly set. To make this latter statement when the bones were in good position is a breach, not of medical ethics alone, but of other and more ordinary ethics.

Nemo.—Our correspondent had better apply to Mr. Richard John Kinkead, Tuam, county Galway.

C. A. O. O., (Dover.)—We cannot afford the required information.

THE communication of *Dr. Edward Malins* (Cradley) shall, if possible, be inserted next week.

DRUGGISTS' CHARGES.

To the Editor of THE LANCET.

SIR,—In confirmation of some of the views expressed in your recent leading article, entitled the "Relation of Pharmacy and Medical Practice" (THE LANCET, October 22nd), the following case is worthy of note.

In the beginning of last July a young lady, who had come to London from a long distance to be under my care, surprised me by remarking that she was very sorry, but she could not afford to take any more of my medicine. This led to several questions and answers, the upshot of which was that it appeared the druggist charged her *4s.* for every 6 ounces of mixture. Thinking she must have made a mistake, I asked her to bring me the druggist's bill, which she said she had at home. Within two hours the bill was in my possession, and there, sure enough, 36 ounces of mixture were charged £1 4s. Still thinking there was a mistake, but this time on the side of the druggist, instead of that of the patient, I sent for him. He came, and assured me that there was no mistake on his part, 4s. being his and "other people's" usual charge for the mixture. Doubting this assertion in as far as it related to "other people," I put on my hat, and walked straight to the nearest druggist's shop, and presented the young lady's prescription. The charge here made was 1s. 6d., being at the rate of 9s. per 36 ounces, instead of £1 4s.

Now, Sir, what was the cause of this striking disparity in price? Were the ingredients used in compounding the mixtures different at the two shops? For the sake of humanity and the good fame of pharmacy, it is to be hoped not. Was it on account of a difference in the quality of the bottles and paper in which the mixture was dispensed? Surely not. Was it on account of the rent of the one shop being 266 per cent. greater than the other? In a word, was the patient paying for "locality and style"? That I can myself answer in the negative; for the £1 4s. establishment is a small shop in a side street, which I fancy the young lady selected on grounds of economy, she being the daughter of a country clergyman, whose blessing in this world consists rather in a superfluity of olive branches than of loaves and fishes.

I shall say no more than that the 1s. 6d. charge was made at a first-class establishment in one of the best streets in London.

Let reflecting minds reflect and answer for themselves the question—Is it the doctor or the druggist who drives the respectable class to seek gratuitous advice?

I am, Sir, yours, &c.,

November 5th, 1870. A PRESCRIBER.

Nyssus.—We have tasted a sample of the wine, and find it of good quality, and suited to either friend or patient.

A Lawyer's Son.—We do not see that the allegations made need materially modify our observations.

Mouche.—We do not prescribe. For the complaint mentioned, the remedy is simple enough. Our correspondent should consult his medical attendant.

NOVEL APPLICATION OF SEA-TANGLE.

To the Editor of THE LANCET.

SIR,—I have lately had an admirable illustration of the value which sea-tangle possesses on account of its increase in bulk when exposed to moisture.

On October 31st a patient was sent to me by my friend, Mr. Day, for an artificial palate. On examining the roof of the mouth, a small fissure of a cylindrical form, and about the size of a wax lucifer-match, presented itself, through which fluid and food forced themselves during deglutition. Finding the aperture too small to admit of the ordinary application of a suppurgent fixed to the upper surface of a gold palate-plate, I had recourse to a small piece of laminaria held in a golden tube forming part of the usual artificial roof. The tube was three-eighths of an inch in length, and the sea-tangle protruded beyond it for a quarter of an inch. After carefully adjusting the edges of the plate to the shape of the palate, I inserted the tube, and held it *in situ* for about five minutes, when the expansion of the laminaria firmly imbedded the plate in the soft palate, and perfectly closed the abnormal orifice. I may add that, owing to the teeth being decayed on both sides of the upper jaw, no opportunity was afforded for fixing the plate by springs; so that had not sea-tangle suggested itself to my mind, all attempt at relief must have proved fruitless.

Trusting this simple expedient may prove of value in similar cases,

I remain, Sir, your faithful servant,

Wimpole-street, Nov. 8th, 1870. HEATHER BIGG, Assoc. I.C.E.

Mr. Frederick Clements.—It is wholly in the discretion of the guardians to appoint whomsoever they please, given the possession of certain qualifications; and they obviously may attach more value to their own knowledge of a candidate than to any testimonials from persons who are strangers to them. It is usual, of course, to write a letter of application.

Syrup.—Our correspondent should apply to Dr. Drysdale. We are not responsible for his quotations.

"ADVICE GRATIS TO THE PROFESSION."

To the Editor of THE LANCET.

SIR,—I was glad to read your remarks on the above subject. It reminds me of two pamphlets I have lately received, presumably from their respective authors. Each *brochure* I returned to the author, with an expression of surprise that he should have the impertinence to forward it to any qualified medical man.

Faithfully yours,

Cheltenham, Nov. 12th, 1870. A. FLEISCHMANN.

L. B., (Nottingham.)—To be in any way associated with a secret remedy, either as prescriber, compounder, proprietor, vendor, or eulogist, is to act in direct antagonism to the first principles of professional rectitude, and in a way that calls for the most severe reprobation. Nothing is more firmly established than the duty of the practitioner to impart his knowledge freely for the general good of his brethren and mankind.

Mr. Henry Weekes.—Individual prudence will be a better protection than such a society as our correspondent suggests.

ST. BARTHOLOMEW'S.

To the Editor of THE LANCET.

SIR,—Your well-known readiness to allow your journal to be a vehicle for all well-grounded complaints, especially from those who but for your powerful aid would be unable to obtain redress, emboldens me to lay before you the following facts relative to the difficulty we, as students of St. Bartholomew's, experience in prosecuting our anatomical studies.

Our student entries this year and last were about 170, exclusive of third-year men. The number of subjects supplied for dissection up to Nov. 12th has been *six*. Under these circumstances, can it be other than mockery to call this a course of practical anatomy? We have but two demonstrators; and as both hold other hospital appointments, and are, moreover, said to be engaged in practice, their visits (like those of angels) are few and far between, and we are in a great measure left to depend for information and assistance upon the kindness of the more advanced among our fellow-students. Considering the handsome fee we pay, we do not consider this treatment as fair and just, and we hope that this statement in your influential journal will stir up our authorities to obtain for us more subjects.

I am, Sir, yours faithfully,

November 16th, 1870. A STUDENT.

ERRATA.—In the Liverpool Report in our last impression, page 675, at the bottom of the first paragraph, instead of "there were only 24 cases," read "there were only 78 cases"; and in the next line, after the word "admissions," insert the word "weekly."

COMMUNICATIONS, LETTERS, &c., have been received from—Prof. Maclean, Netley; Dr. Brown-Séquard, Brighton; Mr. Walton; Mr. Fleischmann, Cheltenham; Dr. Clifford Allbutt, Leeds; Dr. Rogers; Mr. Goldie, Manchester; Mr. Stoney; Dr. Maunsell; Mr. Empson, Lurgan; Mr. Cresswell, Dowlais; Mr. Wheeler; Mr. W. Smith; Mr. Morland; Mr. Wigg, Southminster; Mr. Stevens; Mr. Perkins, Exeter; Mr. Mansell; Mr. Sharpe; Mr. Curry, Queenstown; Mr. Sawyer, York; Dr. Sinclair; Mr. Edwards, Bickley; Mr. Hill, Bristol; Dr. M'Nab, Epping; Dr. Shaw, Stapleharst; Mr. Ramsay, Great Shelford; Mr. Clare; Dr. Shannon, Ropsley; Mr. Key; Mr. Southwell, Mile-end; Mr. Giles; Mr. Oliviera; Mr. Taylor; Mr. Young, Warrington; Mr. Tait; Mr. J. G. Brock; Mr. Bramwell; Mr. Leighton; Mr. R. Morgan, Stafford; Mr. T. Unsworth; Mr. Canning; Dr. Chestnutt, Ahoghill; Mr. Weston; Mr. Brown; Mr. Head; Mr. Samuels, Kingston; Mr. Macdonald; Dr. Anderson; Mr. Lloyd; Mr. B. Roberts, Prestwich; Dr. Foster; Mr. Williams, Festiniog; Dr. Bacon, Fulbourn; Dr. Coxwell, Heavitree; Mr. Masters; Messrs. A. and C. Black, Edinburgh; Dr. Oxley, Liverpool; Dr. GreatRex; Mr. Wilkins, Newbury; Mr. Rix, Manchester; Mr. Bright, Doncaster; Mr. Clement; Mr. Moore; Mr. Wray, Whittlesea; Mr. M'Gowan, Inversnaid; Mr. Atkinson; Mr. Thorne-croft; Mr. Dudley, Great Malvern; Mr. May, Great Crosby; Dr. Riding; Mr. Le Neve Foster; Dr. Sansom; Dr. Saul, Lancaster; Mr. Wilmshurst; Mr. Fletcher, Lincoln; Mr. Gregory; Mr. White; Mr. H. Walker; Dr. Spencer; Dr. Farquharson, Rugby; Mr. Parker, Bath; Dr. Westmorland, Sandal; Dr. Heslop, Birmingham; Dr. A. Wright; Dr. Phillips; Dr. Malins, Cradley; Dr. Davies; Mr. Richardson, Buxton; Mr. Wall; Dr. Eames, Pulham; Mr. Harding; Dr. Warwick; Mr. Charteris; Mr. Campbell, Dundee; Dr. Brown, Stroud; Mr. Jones; Messrs. Schoostensack; W. M.; Nemo; A Student; Nyssus; F. O.; Mouche; J. T. M.; Omega; M.D; W. W.; M.R.C.S. Eng.; L.R.C.P. L.; Medicus; N. P.; An Admiralty Dupe; R. E., Shirley; F.R.C.S.; L., M.D.; R. S. P. T.; Alpha; A. F.; Public Vaccinator; G. P. C.; &c. &c.

Bromsgrove Messenger, Waterton Chronicle, Brighton Gazette, Liverpool Daily Courier, Scarborough Express, Leicester Chronicle, Bury Free Press, Shield, West Sussex Gazette, and *Kentish Express* have been received.

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